



CONSUMABLES CATALOG 2024/25

Consumables for Elementar instruments



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Organic elemental analyzers



rapid CS cube

High precision carbon and sulfur analysis

Your benefits

- Unattended continuous operation: fast and automated carbon and sulfur analysis
- High application flexibility: enables the analysis of a wide range of sample types and weights
- Low maintenance: due to clean combustion, avoidance of dust formation and contamination of the analyzer

Consumables Sets

Article No.	Article Description
200010294	rCScu-4k-CS Set of consumables for rapid CS cube – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples.
200012182	rCScu-4k-C Set of consumables for C analysis on the rapid CS cube – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples

Chemicals & Reagents

Article No.	Article Description
200004773	Aluminium oxide wool, 20 g
200010160	Brass wool, 50 g
200013646	Cerium (IV)oxide (granular) 30 ml
200007554	Copper oxide, coarse, 250 g
200010245	Corundum balls, 50 g
200007521	Quartz chips, 2 - 4 mm, 50 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g
200008986	W ₀₃ -granulate, for filling comb. tube
200012531	W ₀₃ -powder, sample additive, 90 g

Calibration Sets

Article No.	Article Description
200012493	rCScu-cal-C Standard calibration set for rapid CS cube, C mode – low organic soil standard 40 – 300 mg.
200004400	rCScu-cal-S Standard calibration set for rapid CS cube, S mode, coal standard 20 – 100 mg.
200014244	std-coal1 Coal standard 1 – 50 g, < 0.5 w-% S
200004893	std-coal2 Coal standard 2 – 50 g, 0.5 – 1 w-% S
200013858	std-coal3 Coal standard 3 – 50 g, 0.8 – 1.2 w-% S
200004839	std-coal4 Coal standard 4 – 50 g, 2.5 – 3.5 w-% S

Organic elemental analyzers rapid CS cube

Calibration Sets

Article No.	Article Description
200007887	std-coal5 Coal standard 5 - 50 g, 5-6 w-% S
200013228	std-soil-lowTOC Soil standard, 30 g - approx. 1.5 % C, can differ slightly depending on batch.

Sampling & Sample Containers

Article No.	Article Description
200013554	Aluminum boats, 4 x 4 x 11 mm, 1000 pc.
200009311	Aluminum boats, 6 x 6 x 12 mm, 500 pc.
200005417	Aluminum capsules, V = 0.03 ml, 250 pc.
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200008184	Tin capsules, V = 0.1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc.
200011221	Tin foil, 50 x 50 mm, 450 pc.

Organic elemental analyzers rapid CS cube

Reaction Tubes & Accessories

Article No.	Article Description
200014555	Ash finger, 60 mm, slotted
200007638	Ash finger, ceramic
200007844	Combustion / reduction tube (quartz)
200005235	Drying tube, cpl.
200011820	Support tube, 65 mm
200004370	U-tube GL18, compl.

Wear Parts

Article No.	Article Description
200014279	Cone gasket
200014191	O-ring, black, 7.59 x 2.62 mm
200012781	O-ring, black, 9.5 x 1.8 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200008183	O-ring, green, 9.19 x 2.62 mm
200007904	O-ring, green, 16 x 3 mm
200013028	O-ring, green, 18 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200005336	Pressure sleeve 1/8"
200005999	Quad-ring, black, 7.65 x 1.78 mm
200009377	rCSu-maint Maintenance kit for rapid CS cube - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200006621	rCSu-wearparts Set of O-rings/small wear parts, rapid CS cube

Organic elemental analyzers rapid CS cube

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200014862	Funnel, GL 18
200006785	Gloves, temperature resistant, 1 pair
200008416	Leakage set rCScu Leakage set rapid S
200005162	Leather gloves, 1 pair
200009549	manpress-10.5mm-60pos Manual pressing tool, D = 10.5 mm for manual compressing of samples for 60 position sample carousel. Suitable for foils up to 50 x 50 mm.
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200013705	sampleform-solid Solid sample former - for the compressing of wrapped samples, consisting of press and pressing tools diameter 7 and 10.5 mm as well as forming tool for sample cups.
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes
200010676	Tweezers, L = 145 mm

Organic elemental analyzers

rapid OXY cube®

Oxygen analysis has never been more reliable

Your benefits

- Reliable oxygen analysis: High-temperature pyrolysis of up to 1450 °C guarantees complete oxygen conversion
- Industry-leading detection limit: Powerful IR detector (optional) and blank-free pyrolysis reactor
- Wide range of samples: Precise analysis of samples with fluorine or inorganic compounds made possible by glassy carbon pyrolysis reactor
- Precise results: Innovative backflush technology prevents falsification due to interfering gases



Consumables Sets

Article No.	Article Description
200005854	rOXYcu-4k Set of consumables rapid OXY cube® - contains all necessary consumables for approximately 4000 analyses of solid samples.
200006719	rOXYcu-4k-LS Set of consumables for rapid OXY cube® - contains all necessary consumables for approximately 4000 analyses of liquid samples.

Chemicals & Reagents

Article No.	Article Description
200005511	Carbon black conditioned, 10 ml
200013169	Cotton wool, 50 g
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 pieces per pack, granular, free-flowing, 30 g
100007805	EAS WETSORBER® Ready for use water absorber with indicator for C-, H-, N-, O- elemental analysis, 230 g
200006135	Glassy carbon chips, 80 g
100005007	Graphite felt, D = 18 mm, 12 pc.
200014652	Graphite felt, D = 15 mm, 12 pc.
200004827	Quartz wool, 10 g

Measurement Standards & Reference Materials

Article No.	Article Description
200007435	Acetanilide, 5 g test standard for elemental analysis.
200011700	Benzoic acid, 5 g test standard for elemental analysis (0).

Sample Handling

Article No.	Article Description
200012150	VLSvials-1.5ml Sample vials 1.5 ml, screw - cap with septum, 100 pc./package

Organic elemental analyzers rapid OXY cube®

Sampling & Sample Containers

Article No.	Article Description
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.
200014886	Silver capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200009772	Silver capsules, 8 x 5 mm V = 0.12 ml, 250 pc., only for solid samples.
200011391	Silver capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200009914	Tin capsules, 3.75 x 3.5 mm, 100 pc. V = 0.03 ml, only for solid samples.
200006523	Tin capsules, 5 x 3.5 mm V = 0.04 ml, only for solid samples.
200009172	Tin capsules, 8 x 5 mm, 250 pc. V = 0.12 ml, only for solid samples.
200006458	Tin capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples
200008184	Tin capsules, V = 0.1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc.
200011221	Tin foil, 50 x 50 mm, 450 pc.
200013421	vMULcu-conset-EA Selection of sample containers - includes a selection of sample boats and capsules in different sizes and materials for packing of solid and liquid samples.

Organic elemental analyzers rapid OXY cube®

Reaction Tubes & Accessories

Article No.	Article Description
200006728	Ash crucible HT for pyrolysis, D = 12 mm
200013540	Drying tube, 100 mm glass tube only!
200009409	Drying tube, L = 300 mm, compl.
200015088	Glassy carbon tube When replacing the glassy carbon tube, always replace the ceramic protection tube as well.
200007373	Protective ceramic tube
200015226	rOXYcu-PYROTUBE Set glassy carbon tube and protective outer ceramic tube – for rapid OXY cube® and vario PYRO cube®.
200004849	Support tube, D = 12 mm, L = 60 mm

Wear Parts

Article No.	Article Description
200015178	Ball for vall valve, 10 mm blind hole
200011633	O-ring, black, 4 x 1 mm
200013277	O-ring, black, 10.3 x 2.4 mm
200015397	O-ring, green, 4 x 4
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200009016	O-ring, green, 10.5 x 2 mm
200010662	O-ring, green, 17.3 x 2.4 mm
200013028	O-ring, green, 18 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200005338	O-ring, green, 29.5 x 3 mm
200005999	Quad-ring, black, 7.65 x 1.78 mm
200008228	Quad-ring, black, 18.2 x 3.53 mm
200015305	Quad-ring, black, 29.74 x 3.53 mm
200008007	rOXYcu-maint Maintenance kit for rapid OXY cube® – contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200010340	rOXYcu-wearparts Set of O-rings/small wear parts for vario PYRO cube® / rapid OXY cube®
200011004	Set of half shells 10 mm, Set of half shells for UNICUBE®, vario MICRO cube, rapid OXY cube®, vario PYRO cube®, vario TOC cube and vario TOC select.

Organic elemental analyzers rapid OXY cube®

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200010395	Crucible tongs for crucibles, D = 12 mm
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200009077	Leakage set for vario EL cube, vario MACRO cube, vario PYRO cube®, rapid OXY cube® and vario ISOTOPE cube.
200005162	Leather gloves, 1 pair
100005226	manpress-5mm-pyro Manual pressing tool, D = 5 mm - for manual compressing of samples for pyrolysis (rapid OXY cube® and vario PYRO cube® in OH mode).
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200006018	Tube rack to store cold/hot reaction tubes
200010676	Tweezers, L = 145 mm

Organic elemental analyzers



trace SN cube

The very best in ppb analysis

Your benefits

- Highly sensitive sulfur and nitrogen determination: Thanks to the integrated dual-channel system with detection limits of 6 ppb for sulfur and 15 ppb for nitrogen
- Low maintenance and reliable results: Complete, soot-free decomposition of the sample through catalytic combustion
- No cross-sensitivities in sulfur determination: Thanks to the N-Excess module

Chemicals & Reagents

Article No.	Article Description
200015141	Activated carbon, 100 g
200013646	Cerium (IV)oxide (granular) 30 ml
200004784	Grease paste, 2 g, for syringe spindle
200006308	Pt-catalyst, 1 % Pt, 25 g for TOC systems
200007521	Quartz chips, 2 - 4 mm, 50 g
200004827	Quartz wool, 10 g
200005118	tSNcu-1k-SN-solid Set of consumables for trace SN cube for approximately 1000 analyses of solid samples in SN-mode
200005278	tSNcu-5k-N-liquid Set of consumables trace SN cube for approx. 5000 liquid samples (mode N)
200004459	tSNcu-5k-N-solid Set of consumables trace SN cube for approx. 5000 solid samples (mode N)
200011762	tSNcu-5k-S-liquid Set of consumables trace SN cube for approx. 5000 liquid samples (mode S)
200015369	tSNcu-5k-SN-liquid Set of consumables trace SN cube for approx. 5000 liquid samples (mode S+N)
200008405	tSNcu-5k-S-solid Set of consumables trace SN cube for approx. 5000 solid samples (mode S)
200008986	WO ₃ -granulate, for filling comb. tube

Calibration Sets

Article No.	Article Description
200014613	std-dbt-S Dibenzothiophene - 25 g
200004686	std-pyridine-N Pyridine - 100 ml
200008057	std-toluene Toluene 50 ml for blank value compensation - Only to be used in conjunction with the standards tSNcu-std-XXppm-SN
200005905	tSNcu-cal-SN Standard calibration set trace SN cube - Set of 7 standards plus 1 solvent (pyridine and dibenzthiophene in toluene), consisting of: 50 ml Toluol, 1 µg/ml S+N, 5 µg/ml S+N, 10 µg/ml S+N, 50 µg/ml S+N,
200011046	tSNcu-std-1000ppm-SN SN-Standard 1000 µg/ml - 1000 µg/ml N-Pyridine 1000 µg/ml S- Benzothiophene Solvent: 50 ml Toluene
200010724	tSNcu-std-100ppm-SN SN-Standard 100 µg/ml - 100 µg/ml N-Pyridine 100 µg/ml S-Benzothiophene Solvent: 50 ml Toluene

Organic elemental analyzers

trace SN cube

Calibration Sets

Article No.	Article Description
200004441	tSNcu-std-10ppm-SN SN-Standard 10 µg/ml – 10 µg/ml N-Pyridine 10 µg/ml S-Benzothiophene Solvent: 50 ml Toluene
200013676	tSNcu-std-1ppm-SN SN-Standard 1 µg/ml – 1 µg/ml N-Pyridine 1 µg/ml S-Benzothiophene Solvent: 50 ml Toluene
200007263	tSNcu-std-500ppm-SN SN-Standard 500 µg/ml – 500 µg/ml N-pyridine, 500 µg/ml S- benzothiophene, solvent: 50 ml toluene
200013422	tSNcu-std-50ppm-SN SN-Standard 50 µg/ml – 50 µg/ml N-Pyridine 50 µg/ml S-Benzothiophene Solvent: 50 ml Toluene
200004709	tSNcu-std-5ppm-SN SN-Standard 5 µg/ml – 5 µg/ml N-Pyridine 5 µg/ml S-Benzothiophene Solvent: 50 ml Toluene

Sampling & Sample Containers

Article No.	Article Description
200013554	Aluminum boats, 4 x 4 x 11 mm, 1000 pc.
200009311	Aluminum boats, 6 x 6 x 12 mm, 500 pc.
200005417	Aluminum capsules, V = 0.03 ml, 250 pc.
200012803	Aluminum capsules, V = 0.07 ml, 250 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200008184	Tin capsules, V = 0.1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc.
200011221	Tin foil, 50 x 50 mm, 450 pc.
200012150	VLSvials-1.5ml Sample vials 1.5 ml, screw – cap with septum, 100 pc./package

Reaction Tubes & Accessories

Article No.	Article Description
200007844	Combustion / reduction tube (quartz)
200006513	Plug for Merlin Septum, compl.
200014026	Protective tube, 105 mm, slotted
200011820	Support tube, 65 mm

Organic elemental analyzers

trace SN cube

Wear Parts

Article No.	Article Description
200009233	APNA-CLD-maint Maintenance kit for APNA 370 - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200004786	APSA-UV-maint Maintenance kit for APSA 370 - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200015178	Ball for vall valve, 10 mm blind hole
200014279	Cone gasket
200014836	Fitting 1/8", L = 12 mm
200012903	Gasket, yellow
200013525	Microseal-Septum (1 piece)
200014191	O-ring, black, 7.59 x 2.62 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200013842	O-ring, green, 6 x 3 mm
200009016	O-ring, green, 10.5 x 2 mm
200013028	O-ring, green, 18 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200005999	Quad-ring, black, 7.65 x 1.78 mm
200005336	Pressure sleeve 1/8"
200013720	tSNcu-maint Maintenance kit for trace SN cube - contains all wear parts which have to be exchanged in conjunction with a maintenance call. Parts for HORIBA detectors not included.
200005648	tSNcu-wearparts Set of o-rings/small wear parts trace SN cube
200007116	Syringe, 100 µl

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200011283	Leakage set trace SN cube
200005162	Leather gloves, 1 pair
200006018	Tube rack to store cold/hot reaction tubes
200006998	Vacuum grease, 35 g

Organic elemental analyzers

Our analyzers for organic elemental analysis are designed to offer industry-leading versatility in elemental analysis. Thanks to our Advanced Purge and Trap (APT) technology even the most challenging C : N elemental ratios of up to 12,000:1 can be reliably measured. Many of our organic analyzers use our intelligent ball valve technology for blank-free sample transfer. Optional conversion kits make it possible to upgrade every instrument at any time for special applications. All analyzers are designed to simplify daily routine operation and to reduce maintenance to a minimum.



UNICUBE®

Combustion analysis has never been easier

Your benefits

- Highest precision: Even with low sample weights
- Highly reliable measurement results: Even for the most difficult samples
- Low costs per analysis: Low gas consumption and need for consumables
- High flexibility: Simple carrier gas exchange (helium /argon) without hardware adaptation

Consumables Sets

Article No.	Article Description
20001979	unicu-4k-CHN/CN Set of consumables for UNICUBE® – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples in CHN/CN mode.
200008157	unicu-4k-CHNS/CNS Set of consumables for UNICUBE® – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples in CHNS/CNS mode.
200015014	vMULcu-1k-CI Set of consumables for option CI – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 1000 analyses of solid samples (depending on sample weight and matrix).
200003045	vMULcu-1k-0 Set of consumables for option 0 – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 1000 analyses of solid samples.
200000530	vMULcu-4k-0 Set of consumables for option 0 – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples.
200014569	vMULcu-4k-CHN-VLS Set of consumables for vario Liquid Sampler – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of liquid samples in CHN/CN mode.
200009355	vMULcu-4k-CHNS-VLS Set of consumables for vario Liquid Sampler – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of liquid samples in CHNS/CNS mode.

Chemicals & Reagents

Article No.	Article Description
200004773	Aluminium oxide wool, 20 g
200005447	Carbon black, 65 g, ash-free
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200014271	Copper, 100 g
200010245	Corundum balls, 50 g
200009555	Corundum balls, 500 g
200013169	Cotton wool, 50 g
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 pieces per pack, granular, free-flowing, 30 g

Organic elemental analyzers

UNICUBE®

Chemicals & Reagents

Article No.	Article Description
100007805	EAS WETSORBER® Ready for use water absorber with indicator for C-, H-, N-, O- elemental analysis, 230 g
100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g
200009133	Graphite felt, D = 26 mm, 12 pc.
200011666	Polyethylene, 10 g
200008269	Quartz chips, 1 - 2 mm, 100 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g
200008986	WO ₃ -granulate, for filling comb. tube
200009890	WO ₃ -powder, sample additive, 25 g
200012531	WO ₃ -powder, sample additive, 90 g

Calibration Sets

Article No.	Article Description
100006732	unicu-cal-CHNS Standard calibration set for UNICUBE®, CHNS mode - sulfanilamide 0.10 mg - 14.0 mg.
200012243	vMULcu-cal-IR-0 Standard calibration set for option 0-IR: 0.03 mg - 10 mg acetanilide
200008487	vMULcu-cal-IR-S/O Standard calibration set for option S/O-IR: 0.1 - 3.0 mg sulfanilic acid, 1 - 100 mg sulfanilic acid solution 1 mg/ml and 0.03 - 10 mg acetanilide
200010162	vMULcu-cal-IR-S Standard calibration set for option S-IR: 0.1 - 3.0 mg sulfanilic acid and 1 - 100 mg sulfanilic acid solution 1 mg/ml
200009852	vMULcu-cal-TCD-0 Standard calibration set for option 0-TCD: 0.1 - 19 mg benzoic acid

Measurement Standards & Reference Materials

Article No.	Article Description
200007435	Acetanilide, 5 g test standard for elemental analysis.
200011700	Benzoic acid, 5 g test standard for elemental analysis (0).
200007042	LNS standard, 5 g approx. cont. in % C: 67.65 H: 4.95 N: 0.72 S: 0.84 O: 25.84
200005305	std-soil-2.1 Soil standard 2.1 (30 g), ~1 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.
200014800	std-soil-2.4 Soil standard 2.4 (30 g), ~3 % C, ~0.2 % N, ~0.03 % S, composition is batch dependent.
200006419	std-soil-5M Soil standard 5M (30 g), ~2 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.
200005129	Sulfanilamide, 10 g test standard for elemental analysis.
200014950	Sulfanilic acid, 5 g test standard for elemental analysis.

Organic elemental analyzers

UNICUBE®

Sample Handling

Article No.	Article Description
200012150	VLSvials-1.5ml Sample vials 1.5 ml, screw - cap with septum, 100 pc./package

Sampling & Sample Containers

Article No.	Article Description
200013554	Aluminum boats, 4 x 4 x 11 mm, 1000 pc.
200009311	Aluminum boats, 6 x 6 x 12 mm, 500 pc.
200005417	Aluminum capsules, V = 0.03 ml, 250 pc.
200012803	Aluminum capsules, V = 0.07 ml, 250 pc.
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.
200014886	Silver capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200009772	Silver capsules, 8 x 5 mm, 250 pc. V = 0.12 ml, only for solid samples.
200011391	Silver capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc. wall thickness 0.02 mm
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200009914	Tin capsules, 3.75 x 3.5 mm, 100 pc. V = 0.03 ml, only for solid samples.
200006523	Tin capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200009172	Tin capsules, 8 x 5 mm, 250 pc. V = 0.12 ml, only for solid samples.
200006458	Tin capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples
200008184	Tin capsules, V = 0.1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.

Organic elemental analyzers

UNICUBE®

Sampling & Sample Containers

Article No.	Article Description
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc.
200011221	Tin foil, 50 x 50 mm, 450 pc.
200013421	vMULcu-conset-EA Selection of sample containers - includes a selection of sample boats and capsules in different sizes and materials for packing of solid and liquid samples.

Reaction Tubes & Accessories

Article No.	Article Description
200009138	Ash crucible, ceramic, slotted
200014796	Ash crucible, quartz, slotted
200007948	Ash crucible, steel For CHN analysis
200012389	Ash crucibles, quartz, 30 mm
200014555	Ash finger, 60 mm, slotted
100005768	Comb. tube with filling instr. CHNS/CHN Labeled quartz combustion tube suitable for UNICUBE / vario MICRO cube / vario EL cube / vario ISOTOPE select / vario ISOTOPE cube
200007844	Combustion / reduction tube (quartz)
200013540	Drying tube, 100 mm glass tube only!
200013456	Drying tube, 300 mm glass tube only!
200014764	O ₂ lance, 140 mm
200004159	O ₂ lance, 150 mm
200012140	O ₂ lance, 170 mm
200014026	Protective tube, 105 mm, slotted
100002380	Quartz glass bridge for UNICUBE®
100005770	Red. Tube with filling instr. CHNS/CHN Labeled quartz reduction tube, suitable for UNICUBE / vario MICRO cube / vario EL cube / vario ISOTOPE select / vario ISOTOPE cube .
200011820	Support tube, 65 mm

Spare Parts

Article No.	Article Description
200015178	Ball for vall valve, 10 mm blind hole
200011004	Set of half shells 10 mm, Set of half shells for UNICUBE®, vario MICRO cube, rapid OXY cube®, vario PYRO cube®, vario ISOTOPE select, vario TOC cube and vario TOC select.

Organic elemental analyzers

UNICUBE®

Wear Parts

Article No.	Article Description
200015178	Ball for ball valve, 10 mm blind hole
200014764	O2 lance, 140 mm
200012140	O2 lance, 170 mm
200011633	O-ring, black, 4 x 1 mm
200014191	O-ring, black, 7.59 x 2.62 mm
200015397	O-ring, green, 4 x 4
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200013842	O-ring, green, 6 x 3 mm
200009565	O-ring, green, 8 x 2 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200013028	O-ring, green, 18 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200005999	Quad-ring, black, 7.65 x 1.78 mm
200011004	Set of half shells 10 mm, Set of half shells for UNICUBE®, vario MICRO cube, rapid OXY cube®, vario PYRO cube®, vario ISOTOPE select, vario TOC cube and vario TOC select.
200000740	unicu-maint Maintenance kit for UNICUBE / vario ISOTOPE select - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
100003908	unicu-wearparts Set of O-rings and small wear parts for UNICUBE® and vario ISOTOPE select

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200010902	Face spanner for adjustment ball valve
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200004869	Leakage set UNICUBE® / vISOsel
200005162	Leather gloves, 1 pair
200010997	manpress-7mm-120pos Manual pressing tool, D = 7 mm - for manual compressing of samples for 120 position sample carousel. Suitable for boats up to 8 x 8 x 16 mm and foils up to 35 x 35 mm.
200004971	manpress-9mm-80pos Manual pressing tool, D = 9 mm - for manual compressing of samples for 80 position sample carousel. Suitable for foils up to 35 x 35 mm.

Organic elemental analyzers

UNICUBE®

Auxiliaries

Article No.	Article Description
200009549	manpress-10.5mm-60pos Manual pressing tool, D = 10.5 mm for manual compressing of samples for 60 position sample carousel. Suitable for foils up to 50 x 50 mm.
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g

Organic elemental analyzers

UNICUBE® trace

Matrix-independent determination of C and N at trace levels

Your benefits

- High sample throughput: Up to 300 analyses per day
- Precise carbon and nitrogen analysis: The highly sensitive detector enables a detection limit of 10 µg/g or 10 ppm
- High sample flexibility: Suitable for all organic and many inorganic liquids and solids



Consumables Sets

Article No.	Article Description
200006778	unicu-trace-4k Set of consumables UNICUBE® trace – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples (depending on sample weight and matrix).
200014569	vMULcu-4k-CHN-VLS Set of consumables for vario Liquid Sampler – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of liquid samples in CHN/CN mode.

Chemicals & Reagents

Article No.	Article Description
200004773	Aluminium oxide wool, 20 g
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200014271	Copper, 100 g
200010245	Corundum balls, 50 g
200013169	Cotton wool, 50 g
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 pieces per pack, granular, free-flowing, 30 g
100007805	EAS WETSORBER® Ready for use water absorber with indicator for C-, H-, N-, O- elemental analysis, 230 g
200008269	Quartz chips, 1 – 2 mm, 100 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g

Calibration Sets

Article No.	Article Description
100005360	unicu-trace-cal-CN Calibration set UNICUBE® trace – acetanilide 0.005 mg – 10.0 mg

Organic elemental analyzers

UNICUBE® trace

Measurement Standards & Reference Materials

Article No.	Article Description
200007435	Acetanilide, 5 g test standard for elemental analysis.
200007042	LNS standard, 5 g approx. cont. in % C: 67.65 H: 4.95 N: 0.72 S: 0.84 O: 25.84
200005305	std-soil-2.1 Soil standard 2.1 (30 g), ~1 % C, ~0,1 % N, ~0,01 % S, composition is batch dependent.
200014800	std-soil-2.4 Soil standard 2.4 (30 g), ~3 % C, ~0.2 % N, ~0.03 % S, composition is batch dependent.
200006419	std-soil-5M Soil standard 5M (30 g), ~2 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.

Sampling & Sample Containers

Article No.	Article Description
200013554	Aluminum boats, 4 x 4 x 11 mm, 1000 pc.
200009311	Aluminum boats, 6 x 6 x 12 mm, 500 pc.
200005417	Aluminum capsules, V = 0.03 ml, 250 pc.
200012803	Aluminum capsules, V = 0.07 ml, 250 pc.
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.
200014886	Silver capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200009772	Silver capsules, 8 x 5 mm V = 0.12 ml, 250 pc., only for solid samples.
200011391	Silver capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200009914	Tin capsules, 3.75 x 3.5 mm, 100 pc. V = 0.03 ml, only for solid samples.
200006523	Tin capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.

Organic elemental analyzers

UNICUBE® trace

Sampling & Sample Containers

Article No.	Article Description
200009172	Tin capsules, 8 x 5 mm, 250 pc. V = 0.12 ml, only for solid samples.
200006458	Tin capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples
200008184	Tin capsules, V = 0.1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc.
200011221	Tin foil, 50 x 50 mm, 450 pc.
200013421	vMULcu-conset-EA Selection of sample containers - includes a selection of sample boats and capsules in different sizes and materials for packing of solid and liquid samples.

Reaction Tubes & Accessories

Article No.	Article Description
200006957	Adjusting sleeve - combustion tube
200009138	Ash crucible, ceramic, slotted
200014796	Ash crucible, quartz, slotted
200007948	Ash crucible, steel For CHN analysis
200014555	Ash finger, 60 mm, slotted
200007844	Combustion / reduction tube (quartz)
200013540	Drying tube, 100 mm glass tube only!
200013456	Drying tube, 300 mm glass tube only!
200005887	O ₂ lance, 90 mm
200014026	Protective tube, 105 mm, slotted
100002380	Quartz glass bridge for UNICUBE®

Spare Parts

Article No.	Article Description
200015178	Ball for ball valve, 10 mm blind hole
200011004	Set of half shells 10 mm, Set of half shells for UNICUBE®, vario MICRO cube, rapid OXY cube®, vario PYRO cube®, vario ISOTOPE select, vario TOC cube and vario TOC select.

Organic elemental analyzers

UNICUBE® trace

Wear Parts

Article No.	Article Description
200014191	O-ring, black, 7.59 x 2.62 mm
200015397	O-ring, green, 4 x 4
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200013842	O-ring, green, 6 x 3
200009565	O-ring, green, 8 x 2 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200013028	O-ring, green, 18 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200005999	Quad-ring, black, 7.65 x 1.78 mm
200000740	unicu-maint Maintenance kit for UNICUBE® - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
100003908	unicu-wearparts Set of O-rings /small wear parts, UNICUBE® / vario ISOTOPE select

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200010902	Face spanner for adjustment of the ball
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200004869	Leakage set UNICUBE® / vISOsel
200005162	Leather gloves, 1 pair
200009549	manpress-10.5mm-60pos Manual pressing tool, D = 10.5 mm for manual compressing of samples for 60 position sample carousel. Suitable for foils up to 50 x 50 mm.
200010997	manpress-7mm-120pos Manual pressing tool, D = 7 mm - for manual compressing of samples for 120 position sample carousel. Suitable for boats up to 8 x 8 x 16 mm and foils up to 35 x 35 mm.
200004971	manpress-9mm-80pos Manual pressing tool, D = 9 mm - for manual compressing of samples for 80 position sample carousel. Suitable for foils up to 35 x 35 mm.
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g

Organic elemental analyzers

vario EL cube



Unsurpassed performance and versatility in elemental analysis

Your benefits

- Highest precision: Sharp peak separation by 3 gas-specific adsorption columns guarantees complete baseline separation
- Exceptional element concentration and sample weight range: Large dynamic measuring range up to 40 mg absolute carbon content
- High sample flexibility: Reliable results for a wide range of samples thanks to matrix independence
- Ultimate versatility: Large selection of optional conversion kits for a wide range of applications

Consumables Sets

Article No.	Article Description
200012936	vELcu-4k-CHN Set of consumables for vario EL cube – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses (depending on sample weight and matrix) in CHN/CN/N mode.
200005726	vELcu-4k-CHNS Set of consumables for vario EL cube – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses (depending on sample weight and matrix) in CHNS/CNS mode.
200015014	vMULcu-1k-Cl Set of consumables for option Cl – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 1000 analyses of solid samples (depending on sample weight and matrix).
200003045	vMULcu-1k-0 Set of consumables for option 0 – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 1000 analyses of solid samples.
200014569	vMULcu-4k-CHN-VLS Set of consumables for vario Liquid Sampler – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of liquid samples in CHN/CN mode.
200009355	vMULcu-4k-CHNS-VLS Set of consumables for vario Liquid Sampler – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of liquid samples in CHNS/CNS mode.
200000530	vMULcu-4k-0 Set of consumables for option 0 – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples.

Chemicals & Reagents

Article No.	Article Description
200004773	Aluminium oxide wool, 20 g
200005447	Carbon black, 65 g, ash-free
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200014271	Copper, 100 g
200012217	Copper, 500 g
200010245	Corundum balls, 50 g
200009555	Corundum balls, 500 g
200013169	Cotton wool, 50 g
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 pieces per pack, granular, free-flowing, 30 g
100007805	EAS WETSORBER® Ready for use water absorber with indicator for C-, H-, N-, O- elemental analysis, 230 g
100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g

Organic elemental analyzers vario EL cube

Chemicals & Reagents

Article No.	Article Description
200009133	Graphite felt, D = 26 mm, 12 pc.
200011666	Polyethylene, 10 g
200008269	Quartz chips, 1 - 2 mm, 100 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g
200008986	WO ₃ -granulate, for filling comb. tube
200009890	WO ₃ -powder, sample additive, 25 g
200012531	WO ₃ -powder, sample additive, 90 g

Calibration Sets

Article No.	Article Description
200011922	vELcu-cal-CHN Standard calibration set vario EL cube, CHN mode - 0.1 mg - 30 mg acetanilide 14 mg - 24 mg stearic acid
200011724	vELcu-cal-CHNS Standard calibration set vario EL cube, CHNS mode - 0.1 mg - 11 mg sulfanilic acid 5 mg - 30 mg acetanilide 14 mg - 24 mg stearic acid
200008748	vELcu-cal-CN/N Standard calibration set vario EL cube, CN/N-mode - 0.1 mg - 30 mg acetanilide
200011679	vELcu-cal-CNS Standard calibration set vario EL cube, CNS mode - 0.1 mg - 11 mg Sulfanilic acid 5 mg - 30 mg acetanilide
200012243	vMULcu-cal-IR-0 Standard calibration set for option 0-IR: 0.03 mg - 10 mg acetanilide
200010162	vMULcu-cal-IR-S Standard calibration set for option S-IR: 0.1 - 3.0 mg sulfanilic acid and 1 - 100 mg sulfanilic acid solution 1 mg/ml
200008487	vMULcu-cal-IR-S/O Standard calibration set for option S/O-IR: 0.1 - 3.0 mg sulfanilic acid, 1 - 100 mg sulfanilic acid solution 1 mg/ml and 0.03 - 10 mg acetanilide
200009852	vMULcu-cal-TCD-0 Standard calibration set for option 0-TCD: 0.1 - 19 mg benzoic acid

Measurement Standards & Reference Materials

Article No.	Article Description
200007435	Acetanilide, 5 g test standard for elemental analysis.
200011700	Benzoic acid, 5 g test standard for elemental analysis (0).
200007042	LNS standard, 5 g approx. cont. in % C: 67.65 H: 4.95 N: 0.72 S: 0.84 O: 25.84
200005305	std-soil-2.1 Soil standard 2.1 (30 g), ~1 % C, ~0,1 % N, ~0,01 % S, composition is batch dependent.
200014800	std-soil-2.4 Soil standard 2.4 (30 g), ~3 % C, ~0.2 % N, ~0.03 % S, composition is batch dependent.
200006419	std-soil-5M Soil standard 5M (30 g), ~2 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.

Organic elemental analyzers

vario EL cube

Measurement Standards & Reference Materials

Article No.	Article Description
200005129	Sulfanilamide, 10 g test standard for elemental analysis.
200014950	Sulfanilic acid, 5 g test standard for elemental analysis.

Sample Handling

Article No.	Article Description
200012150	VLSvials-1.5ml Sample vials 1.5 ml, screw - cap with septum, 100 pc./package

Sampling & Sample Containers

Article No.	Article Description
200013554	Aluminum boats, 4 x 4 x 11 mm, 1000 pc.
200009311	Aluminum boats, 6 x 6 x 12 mm, 500 pc.
200005417	Aluminum capsules, V = 0.03 ml, 250 pc.
200012803	Aluminum capsules, V = 0.07 ml, 250 pc.
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.
200014886	Silver capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200009772	Silver capsules, 8 x 5 mm V = 0.12 ml, 250 pc., only for solid samples.
200011391	Silver capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200006523	Tin capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.

Organic elemental analyzers vario EL cube

Sampling & Sample Containers

Article No.	Article Description
200006458	Tin capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples
200009914	Tin capsules, 3.75 x 3.5 mm, 100 pc. V = 0.03 ml, only for solid samples.
200009172	Tin capsules, 8 x 5 mm, 250 pc. V = 0.12 ml, only for solid samples.
200008184	Tin capsules, V = 0.1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc.
200011221	Tin foil, 50 x 50 mm, 450 pc.
200013421	vMULcu-conset-EA Selection of sample containers - includes a selection of sample boats and capsules in different sizes and materials for packing of solid and liquid samples.

Reaction Tubes & Accessories

Article No.	Article Description
200009138	Ash crucible, ceramic, slotted
200014796	Ash crucible, quartz, slotted
200007948	Ash crucible, steel. For CHN analysis
200012389	Ash crucibles, quartz, 30 mm
200014555	Ash finger, 60 mm, slotted
100005768	Comb. tube with filling instr. CHNS/CHN Labeled quartz combustion tube suitable for UNICUBE / vario MICRO cube / vario EL cube / vario ISOTOPE select / vario ISOTOPE cube
200007844	Combustion / reduction tube (quartz)
200013540	Drying tube, 100 mm glass tube only!
200013456	Drying tube, 300 mm glass tube only!
200014764	O ₂ lance, 140 mm
200004159	O ₂ lance, 150 mm
200012140	O ₂ lance, 170 mm
200014026	Protective tube, 105 mm, slotted
200004147	Quartz glass bridge, 65 mm
100005770	Red. Tube with filling instr. CHNS/CHN Labeled quartz reduction tube, suitable for UNICUBE / vario MICRO cube / vario EL cube / vario ISOTOPE select / vario ISOTOPE cube .
200011820	Support tube, 65 mm
200004370	U-tube GL18, compl.
200005818	U-tube, GL14

Organic elemental analyzers

vario EL cube

Spare Parts

Article No.	Article Description
200010515	Oxygen lance sealing, 10 pc.
200010811	Set of half shells 14 mm

Wear Parts

Article No.	Article Description
200011633	O-ring, black, 4 x 1 mm
200014191	O-ring, black, 7.59 x 2.62 mm
200015397	O-ring, green, 4 x 4
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200008183	O-ring, green, 9.19 x 2.62 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200005999	Quad-ring, black, 7.65 x 1.78 mm
200000555	vELcu-vISOcu-maint Maintenance kit for vario EL cube/vario ISOTOPE cube - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200007731	vELcu-wearparts Set of O rings and small wear parts for vario EL cube / vario ISOTOPE cube

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200010902	Face spanner for adjustment of the ball
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200009077	Leakage set for vario EL cube, vario MACRO cube, vario PYRO cube®, rapid OXY cube® and vario ISOTOPE cube.
200005162	Leather gloves, 1 pair
200009549	manpress-10.5mm-60pos Manual pressing tool, D = 10.5 mm for manual compressing of samples for 60 position sample carousel. Suitable for foils up to 50 x 50 mm.
200010997	manpress-7mm-120pos Manual pressing tool, D = 7 mm - for manual compressing of samples for 120 position sample carousel. Suitable for boats up to 8 x 8 x 16 mm and foils up to 35 x 35 mm.
200004971	manpress-9mm-80pos Manual pressing tool, D = 9 mm - for manual compressing of samples for 80 position sample carousel. Suitable for foils up to 35 x 35 mm.

Organic elemental analyzers vario EL cube

Auxiliaries

Article No.	Article Description
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200013203	Support rod, combustion tube, 110 mm
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g

Organic elemental analyzers

vario MACRO cube



The one and only CHNS macro analyzer

Your benefits

- Largest sample weight ideal for inhomogeneous samples: absolute carbon contents of up to 150 mg possible
- Ultimate versatility in the macro range: In addition to simultaneous CHNS analysis, options for analyzing chlorine and oxygen are available
- Sample preparation reduced to a minimum: Large sample weights of up to 1.5 g possible

Consumables Sets

Article No.	Article Description
200015267	vMACcu-4k-CHN Set of consumables for vario MACRO cube – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples in CHN/CN mode.
200010188	vMACcu-4k-CHNS Set of consumables for vario MACRO cube, CHNS/CNS – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples in CHNS/CNS mode.
200003045	vMULcu-1k-0 Set of consumables for option 0 – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 1000 analyses of solid samples.
200000530	vMULcu-4k-0 Set of consumables for option 0 – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples.

Chemicals & Reagents

Article No.	Article Description
200004773	Aluminium oxide wool, 20 g
200005447	Carbon black, 65 g, ash-free
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200014271	Copper, 100 g
200010245	Corundum balls, 50 g
200009555	Corundum balls, 500 g
200013169	Cotton wool, 50 g
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 pieces per pack, granular, free-flowing, 30 g
100007805	EAS WETSORBER® Ready for use water absorber with indicator for C-, H-, N-, O- elemental analysis, 230 g
100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g
200009133	Graphite felt, D = 26 mm, 12 pc.
200011666	Polyethylene, 10 g
200007811	Pt catalyst 5 %, 30 g
200008269	Quartz chips, 1 – 2 mm, 100 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g
200010174	Tungsten kit, (granulate + spacers)
200010974	Tungsten, 500 g, granulated

Organic elemental analyzers vario MACRO cube

Chemicals & Reagents

Article No.	Article Description
200008986	W03-granulate, for filling comb. tube
200009890	W03-powder, sample additive, 25 g
200012531	W03-powder, sample additive, 90 g

Calibration Sets

Article No.	Article Description
200014733	vMACcu-cal-CN/N Standard calibration set vario MACRO cube, CN/N mode - 1 mg - 150 mg Phenylalanine
200006420	vMACcu-cal-CHN Standard calibration set vario MACRO cube, CHN mode - 1 mg - 125 mg Phenylalanine
200005758	vMACcu-cal-CHNS Standard calibration set vario MACRO cube, CHNS mode - 50 mg - 125 mg Phenylalanine, 0.3 mg - 60 mg Sulfanilamide
200012243	vMULcu-cal-IR-0 Standard calibration set for option 0-IR: 0.03 mg - 10 mg acetanilide
200010162	vMULcu-cal-IR-S Standard calibration set for option S-IR: 0.1 - 3.0 mg sulfanilic acid and 1 - 100 mg sulfanilic acid solution 1 mg/ml
200008487	vMULcu-cal-IR-S/O Standard calibration set for option S/O-IR: 0.1 - 3.0 mg sulfanilic acid, 1 - 100 mg sulfanilic acid solution 1 mg/ml and 0.03 - 10 mg acetanilide
200009852	vMULcu-cal-TCD-0 Standard calibration set for option 0-TCD: 0.1 - 19 mg benzoic acid

Measurement Standards & Reference Materials

Article No.	Article Description
200009765	Aspartic acid, 100 g
200011700	Benzoic acid, 5 g test standard for elemental analysis (0).
200005806	Glutamic acid, purity >99 %, 250 g
200007042	LNS standard, 5 g approx. cont. in % C: 67.65 H: 4.95 N: 0.72 S: 0.84 O: 25.84
200008105	Phenylalanine, 25 g
200014244	std-coal1 Coal standard 1 - 50 g < 0.5 w-% S
200004893	std-coal2 Coal standard 2 - 50 g 0.5 - 1 w-% S
200013858	std-coal3 Coal standard 3 - 50 g 0.8 - 1.2 w-% S
200004839	std-coal4 Coal standard 4 - 50 g 2.5 - 3.5 w-%S
200013228	std-soil-low TOC Soil standard, 30 g - approx. 1.5 % C, can differ slightly depending on batch.
200005305	std-soil-2.1 Soil standard 2.1 (30 g), ~1 % C, ~0,1 % N, ~0,01 % S, composition is batch dependent.
200014800	std-soil-2.4 Soil standard 2.4 (30 g), ~3 % C, ~0.2 % N, ~0.03 % S, composition is batch dependent.

Organic elemental analyzers vario MACRO cube

Measurement Standards & Reference Materials

Article No.	Article Description
200006419	std-soil-5M Soil standard 5M (30 g), ~2 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.
200005583	Sulfadiazine, 100 g
200005129	Sulfanilamide, 10 g test standard for elemental analysis.
200014950	Sulfanilic acid, 5 g test standard for elemental analysis.

Sampling & Sample Containers

Article No.	Article Description
200005249	Assortment sample wrapping contains a selection of sample wrapping in various sizes
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200008184	Tin capsules, V = 0.1 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc.
200011221	Tin foil, 50 x 50 mm, 450 pc.

Reaction Tubes & Accessories

Article No.	Article Description
200007679	Ash crucible, ceramic, not slotted
200008114	Ash crucible, steel, vMACcu, CHN/ CN/ N
200012389	Ash crucibles, quartz, 30 mm
200014555	Ash finger, 60 mm, slotted
200014970	Combustion-, post combustion tube
200007844	Combustion / reduction tube (quartz)
200011961	Distance ring
200013540	Drying tube, 100 mm glass tube only!
200014729	Drying tube, compl.
200011489	Drying tube, L = 348 mm

Organic elemental analyzers vario MACRO cube

Reaction Tubes & Accessories

Article No.	Article Description
200013977	Filter tube 42 mm compl. incl. grey caps, seal and silver wool filling
200006003	Glass tube, L = 348 mm with caps, connectors and fittings
200014764	O ₂ lance, 140 mm
200012140	O ₂ lance, 170 mm
200014026	Protective tube, 105 mm, slotted
200004147	Quartz glass bridge, 65 mm
200010457	Spacer, 25 pc.
200011820	Support tube, 65 mm
200007320	Thermal tube, slitted, L = 54mm
200011310	Wire mesh, round, D = 22 mm

Spare Parts

Article No.	Article Description
200010515	Oxygen lance sealing, 10 pc.
200010811	Set of half shells 14 mm

Wear Parts

Article No.	Article Description
200011633	O-ring, black, 4 x 1 mm
200014191	O-ring, black, 7.59 x 2.62 mm
200015397	O-ring, green, 4 x 4 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200009565	O-ring, green, 8 x 2 mm
200007904	O-ring, green, 16 x 3 mm
200013028	O-ring, green, 18 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007217	O-ring, green, 22 x 2 mm
200007469	O-ring green, 24 x 2 mm
200005999	Quad-ring, black, 7.65 x 1.78 mm
200010707	vMACcu-maint Maintenance kit for vario MACRO cube - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200006552	vMACcu-wearparts Set of O-rings and small wear parts vario MACRO cube

Organic elemental analyzers

vario MACRO cube

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200010902	Face spanner for adjustment of the ball
200004594	Funnel, GL 14
200014862	Funnel, GL 18
200006785	Gloves, temperature resistant, 1 pair
200009077	Leakage set for vario EL cube, vario MACRO cube, vario PYRO cube®, rapid OXY cube® and vario ISOTOPE cube.
200005162	Leather gloves, 1 pair
200009549	manpress-10.5mm-60pos Manual pressing tool, D = 10.5 mm for manual compressing of samples for 60 position sample carousel. Suitable for foils up to 50 x 50 mm.
200010997	manpress-7mm-120pos Manual pressing tool, D = 7 mm - for manual compressing of samples for 120 position sample carousel. Suitable for boats up to 8 x 8 x 16 mm and foils up to 35 x 35 mm.
200004971	manpress-9mm-80pos Manual pressing tool, D = 9 mm - for manual compressing of samples for 80 position sample carousel. Suitable for foils up to 35 x 35 mm.
200009657	Manually operated drilling device for cleaning steel tubes
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200004325	Spoon, approx. measure for 20 g tungsten
200015017	Stuffing tool
200013203	Support rod, combustion tube, 110 mm
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g

Organic elemental analyzers



vario MAX cube

Reach a new level of sample throughput

Your benefits

- Simplified sample preparation: Large, reusable crucibles for liquid and solid samples up to 5 g/5 ml
- Highest sample throughput: fast, unattended analysis thanks to automatic sample supply and ash removal
- Independence from rising gas prices and supply bottlenecks: free choice of carrier gas (argon or helium)

Consumables Sets

Article No.	Article Description
200012096	vMAXcu-2k-CNS Set of consumables for vario MAX cube CNS – contains necessary chemicals for approximately 2000 analyses of solid or liquid samples, except EAS WETSORBER S and silver wool.
200008077	vMAXcu-4k-CN Set of consumables for vario MAX cube N/CN – contains necessary chemicals for approximately 4000 analyses of solid or liquid samples, except EAS CARBSORBER and EAS WETSORBER.
200004526	vMAXcu-conven-CN Convenience kit vario MAX cube N, N/CN – contains all items necessary for faster routine maintenance such as tube exchange.
200015289	vMAXcu-conven-CNS Convenience kit vario MAX cube CNS – contains all necessary items (reaction tubes, etc.) for fast tube exchange and further wear parts.

Chemicals & Reagents

Article No.	Article Description
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200014271	Copper, 100 g
200012217	Copper, 500 g
200010245	Corundum balls, 50 g
200009555	Corundum balls, 500 g
200013169	Cotton wool, 50 g
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 pieces per pack, granular, free-flowing, 30 g
100007805	EAS WETSORBER® Ready for use water absorber with indicator for C-, H-, N-, O- elemental analysis, 230 g
100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g
200007811	Pt catalyst 5 %, 30 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g
200010174	Tungsten kit, (granulate + spacers)
200010974	Tungsten, 500 g, granulated
200008986	WO ₃ -granulate, for filling comb. tube
200012531	WO ₃ -powder, sample additive, 90 g

Organic elemental analyzers vario MAX cube

Calibration Sets

Article No.	Article Description
200006539	vMAXcu-cal-CN/N Standard calibration set vario MAX cube, CN/N mode – 3 mg – 75 mg aspartic acid
200004292	vMAXcu-cal-CNS Standard calibration set vario MAX cube, CNS mode – 0,3 mg – 80 mg sulfadiazine
200009845	vMAXcu-cal-CNS-IR Standard calibration set for vario MAX cube CNS with option S-IR – 0.02 mg – 80 mg sulfadiazine (customer: 100 mg – 140 mg sulfadiazine, 100 mg – 550 mg aspartic acid).

Measurement Standards & Reference Materials

Article No.	Article Description
200007435	Acetanilide, 5 g test standard for elemental analysis.
200009765	Aspartic acid, 100 g
200007042	LNS standard, 5 g approx. cont. in % C: 67.65 H: 4.95 N: 0.72 S: 0.84 O: 25.84
200013228	std-soil-lowTOC Soil standard, 30 g – approx. 1.5 % C, can differ slightly depending on batch.
200005305	std-soil-2.1 Soil standard 2.1 (30 g), ~1 % C, ~0,1 % N, ~0,01 % S, composition is batch dependent.
200014800	std-soil-2.4 Soil standard 2.4 (30 g), ~3 % C, ~0.2 % N, ~0.03 % S, composition is batch dependent.
200006419	std-soil-5M Soil standard 5M (30 g), ~2 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.
200005583	Sulfadiazine, 100 g
200005129	Sulfanilamide, 10 g test standard for elemental analysis.
200014950	Sulfanilic acid, 5 g test standard for elemental analysis.
200006355	Uric acid, 99 +%, 25 g

Sample Handling

Article No.	Article Description
100000968	sampletray-90 Sample tray for 90 samples

Reaction Tubes & Accessories

Article No.	Article Description
200006408	Combustion tube, steel
200005470	Drying tube, 150 mm, compl.
200006003	Drying tube, 348 mm, compl. with caps, connectors and fittings
200011489	Drying tube, L = 348 mm

Organic elemental analyzers vario MAX cube

Reaction Tubes & Accessories

Article No.	Article Description
200004775	Gripper arm with insert (CN)
200004298	Gripper arm with insert (CNS)
200011480	Gripper arm with insert (CNS special) Robust gripper arm for all modes
200005586	Plug for reduction tube, bottom
200005339	Plug for reduction tube, top
200013679	Post combustion tube, steel
200014366	Protector ring gripper arm for argon use
200004147	Quartz glass bridge, 65 mm
200011961	Spacer
200010457	Spacer, 25 pc.
200011310	Wire mesh ronde, D = 22 mm
200006395	Wire mesh ronde, D = 26.8 mm

Wear Parts

Article No.	Article Description
200004665	MAX-wearparts Set of O-rings and small wear parts vario MAX cube / rapid MAX N exceed
200011633	O-ring, black, 4 x 1 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200006004	O-ring, green, 7.5 x 2.5 mm
200009565	O-ring, green, 8 x 2 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200007904	O-ring, green, 16 x 3 mm
200007224	O-ring, green, 20 x 2 mm
200007217	O-ring, green, 22 x 2 mm
200011057	O-ring, green, 25 x 2 mm
200014284	O-ring, red, 6 x 2 mm
200008068	O-ring, red, 32 x 3 mm
200005999	Quad-ring, black, 7.65 x 1.78 mm
200006143	Shaft sealing
200013136	vMAXcu-maint Maintenance kit for vario MAX cube – contains all wear parts which have to be exchanged in conjunction with a maintenance call.

Organic elemental analyzers vario MAX cube

Auxiliaries

Article No.	Article Description
200014860	Adjustment tool for sample holder
200009514	Brass brush
200014382	Clamp, large
200014254	Clamp, small
200015256	Filter, diameter 18 mm
200010252	Funnel, D = 65 mm
200004594	Funnel, GL 14
200014862	Funnel, GL 18
200006785	Gloves, temperature resistant, 1 pair
20001113	Leakage set vMAXcu, sTOCcu, rMAXNex
200005162	Leather gloves, 1 pair
200009657	Manually operated drilling device for cleaning steel tubes
200006305	Measuring tube combustion Measuring tube for filling the combustion tube
200006073	Measuring tube post combustion CN Measuring tube for filling the post combustion tube in CN mode
200011462	Measuring tube post combustion CNS Measuring tube for filling the post combustion tube in CNS mode
200010100	Micro spatula
200010238	Sample tray for 18 samples
200007700	Spiral drill, 0.8 mm for nozzle cleaning
200004325	Spoon, approx. measure for 20 g tungsten
200011912	Tool holding device for spiral drill (200007700)
200004592	Tools for argon usage
200006018	Tube rack to store cold/hot reaction tubes
200010676	Tweezers, L = 145 mm

Nitrogen and protein analyzers

Our nitrogen and protein analyzers use the high-temperature combustion method according to Dumas, which has clear advantages over Kjeldahl regarding laboratory safety, sample throughput, labor time, amount of chemical waste and thus cost-per-analysis. Our analyzers for the determination of nitrogen and protein are specially optimized to meet your needs in terms of price-per-sample, analysis time and detection limits.



rapid MAX N exceed

MAXimum performance in nitrogen and protein analysis

Your benefits

- Highest throughput: Fast, unattended analyses
- Simplified sample preparation: Large weighing ranges and sample volumes
- Low cost per sample: Reusable crucibles; Choice between Helium / Argon mode and less consumables consumption thanks to EAS REGAINER® technology

Consumables Sets

Article No.	Article Description
100005897	EAS COMBUSTOR – pre-filled post-combustion tube for up to 2000 samples (depending on sample weight and matrix).
200006862	EAS REDUCTOR – pre-filled reduction tube for up to 2000 samples (depending on sample weight and matrix).
200014515	MAX-crucisol Crucibles, steel – 100 pc./package for vario MAX cube / rapid MAX N exceed.
200011130	rMAXNex-4k Set of consumables for rapid MAX N exceed – contains chemicals for approximately 4000 samples, except EAS CARBSORBER and EAS WETSORBER®.
200014556	rMAXNex-conven Convenience kit rapid MAX N exceed – contains all items necessary for faster routine maintenance such as tube exchange.

Chemicals & Reagents

Article No.	Article Description
200010160	Brass wool, 50 g
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200010245	Corundum balls, 50 g
200009555	Corundum balls, 500 g
200013169	Cotton wool, 50 g
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 pieces per pack, granular, free-flowing, 30 g
200008093	EAS REGAINER® 500 g patented, oxygen-binding reagent dedicated to N-protein determination
100007805	EAS WETSORBER® Ready for use water absorber with indicator for C-, H-, N-, O- elemental analysis, 230 g
200007521	Quartz chips, 2 – 4 mm, 50 g
200004827	Quartz wool, 10 g
200008637	Salt binding powder, 250 g additive to be used for N/protein analysis of samples high in salt content

Nitrogen and protein analyzers

rapid MAX N exceed

Calibration Sets

Article No.	Article Description
200005083	rMAXNex-cal Standard calibration set for rapid MAX N exceed - The calibration kit contains 0.3 mg - 100 mg aspartic acid packed in tin boats. The customer has to weigh 150 - 300 mg aspartic acid and 100 mg - 450 mg uric acid directly into the sample crucibles to complete the calibration (see the operating manual for further instructions).

Measurement Standards & Reference Materials

Article No.	Article Description
200009765	Aspartic acid, 100 g
200005806	Glutamic acid, 250 g purity >99 %
200007751	Wheat flour standard, 30 g approximately 1.9 % N, includes Dumas and Kjeldahl analysis reference values

Sample Handling

Article No.	Article Description
100000968	sampletray-90 Sample tray for 90 samples

Reaction Tubes & Accessories

Article No.	Article Description
200006408	Combustion tube, steel
200008167	Cooling tube, compl.
200006003	Drying tube, 348 mm, compl. with caps, connectors and fittings
200011489	Drying tube, L = 348 mm
200004775	Gripper arm with insert (CN)
200008399	Plug for post combustion tube, compl.
200005586	Plug for reduction tube, bottom
200005339	Plug for reduction tube, top
200013679	Post combustion tube, steel
200014366	Protector ring gripper arm for argon use
200004147	Quartz glass bridge, 65 mm
200011961	Spacer
200011310	Wire mesh ronde, D = 22 mm
200006395	Wire mesh ronde, D = 26.8 mm

Nitrogen and protein analyzers rapid MAX N exceed

Wear Parts

Article No.	Article Description
200004665	MAX-wearparts Set of O-rings and small wear parts vario MAX cube / rapid MAX N exceed
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200006004	O-ring, green, 7.5 x 2.5 mm
200009565	O-ring, green, 8 x 2 mm
200008183	O-ring, green, 9.19 x 2.62 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200007904	O-ring, green, 16 x 3 mm
200007224	O-ring, green, 20 x 2 mm
200007217	O-ring, green, 22 x 2 mm
200008068	O-ring, red, 32 x 3 mm
200013971	rMAXNex-maint Maintenance kit for rapid MAX N exceed – contains all wear parts which have to be exchanged in line with a maintenance call.
200007811	Pt catalyst 5 %, 30 g
200005999	Quad-ring, black, 7.65 x 1.78 mm
200006143	Shaft sealing

Auxiliaries

Article No.	Article Description
200014860	Adjustment tool for sample holder
200009514	Brass brush
200014382	Clamp, large
200014254	Clamp, small
200011301	EAS REGAINER® dip stick
200010013	Filling and measuring tube, rMAXNex
200006667	Funnel stainless steel
200010252	Funnel, D = 65 mm
200014862	Funnel, GL 18
200006785	Gloves, temperature resistant, 1 pair
200011113	Leakage set vMAXcu, sTOCcu, rMAXNex
200005162	Leather gloves, 1 pair
200009657	Manually operated drilling device for cleaning steel tubes
200010238	Sample tray for 18 samples
200004592	Tools for argon usage
200007700	Spiral drill, 0.8 mm for nozzle cleaning
200011912	Tool holding device for spiral drill (200007700)
200006018	Tube rack to store cold/hot reaction tubes
200006998	Vacuum grease, 35 g

Nitrogen and protein analyzers



rapid N exceed®

Time to rethink nitrogen and protein analysis

Your benefits

- Fast analysis: Results in less than 4 minutes
- Lowest cost per sample: CO₂ as carrier gas and less consumables consumption thanks to EAS REGAINER® technology
- Space-saving: Smallest footprint available

Consumables Sets

Article No.	Article Description
100005897	EAS COMBUSTOR – pre-filled post-combustion tube for up to 2000 samples (depending on sample weight and matrix).
200006862	EAS REDUCTOR – prefilled reduction tube for up to 2000 samples (depending on sample weight and matrix).
100004552	rex-PROFER EAS PROFER – prefilled exchangeable tube for enhanced analysis of fertilizers, especially for demanding samples with high sulfur content. Only applicable with the corresponding upgrade kit.
200007115	rNex-4k Set of consumables for rapid N exceed® – contains chemicals for approximately 4000 samples, except EAS WETSORBER®.
200005284	rNex-conven Convenience kit rapid N exceed® – contains all items necessary for faster routine maintenance such as tube exchange.

Chemicals & Reagents

Article No.	Article Description
200010160	Brass wool, 50 g
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200010245	Corundum balls, 50 g
200009555	Corundum balls, 500 g
200013169	Cotton wool, 50 g
200008093	EAS REGAINER® 500 g patented, oxygen-binding reagent dedicated to N-protein determination
100007805	EAS WETSORBER® Ready for use water absorber with indicator for C-, H-, N-, O- elemental analysis, 230 g
200007811	Pt catalyst 5 %, 30 g
200004827	Quartz wool, 10 g

Calibration Sets

Article No.	Article Description
200004270	rNex-cal Standard calibration set rapid N exceed®, 1 mg – 650 mg aspartic acid

Nitrogen and protein analyzers

rapid N exceed®

Measurement Standards & Reference Materials

Article No.	Article Description
200007435	Acetanilide, 5 g test standard for elemental analysis.
200005806	Glutamic acid, 250 g purity > 99 %
200007751	Wheat flour standard, 30 g approximately 1.9 % N, includes Dumas and Kjeldahl analysis reference values

Sampling & Sample Containers

Article No.	Article Description
200013930	Silver foil, 40 x 40 mm, 100 pc.
200008184	Tin capsules, V = 0.1 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc.
200011221	Tin foil, 50 x 50 mm, 450 pc.
200011991	vMULcu-SNfpaper Nitrogen / sulfur free paper for elemental analysis, 60 x 60 mm, 500 pc./package – used with solid sample former for wrapping of solid samples to avoid cross contaminations and to minimize ash.

Reaction Tubes & Accessories

Article No.	Article Description
200004619	Ash crucible, stainless steel, rNex
200006734	Ash finger ceramic, special appl.
200006484	Combustion tube rapid N exceed®
200004752	Drying tube rNex, 348 mm, compl. Glass tube, 348 mm long, complete with caps and connectors
200005470	Drying tube, 150 mm, compl. Glass tube, 150 mm long, complete with caps and connectors
200011987	Filter tube GL 14, L = 42 mm, compl. Filter tube, complete with caps and connectors
200014764	O ₂ lance, 140 mm
200008399	Plug for post combustion tube, compl.
200005586	Plug for reduction tube, bottom
200005339	Plug for reduction tube, top
200013679	Post combustion tube, steel
200004147	Quartz glass bridge, 65 mm
200011961	Spacer
200015434	U-tube, compl. (water separator)
200011310	Wire mesh ronde, D = 22 mm
200006395	Wire mesh ronde, D = 26.8 mm

Nitrogen and protein analyzers

rapid N exceed®

Wear Parts

Article No.	Article Description
200014279	Cone gasket 1/8"
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200013842	O-ring, green, 6 x 3
200006004	O-ring, green, 7.5 x 2.5 mm
200009565	O-ring, green, 8 x 2 mm
200008183	O-ring, green, 9.19 x 2.62 mm
200007904	O-ring, green, 16 x 3 mm
200013028	O-ring, green, 18 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007217	O-ring, green, 22 x 2 mm
200015449	O-ring, green, 25 x 2 mm
200008068	O-ring, red, 32 x 3 mm
200010515	Oxygen lance sealing, 10 pc.
200009567	Pressure sleeve 1/16"
200005336	Pressure sleeve 1/8"
200008514	Pressure sleeve GL 14
200005999	Quad-ring, black, 7.65 x 1.78 mm
200007459	rNex-maint Maintenance kit for rapid N exceed® - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200005876	rNex-wearparts Set of O-rings/small wear parts rapid N exceed® and rapid N cube
200012673	Set of half shells 15 mm

Auxiliaries

Article No.	Article Description
200013405	Clamp (glass tube)
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200011301	EAS REGAINER® dip stick
200010902	Face spanner for adjustment of the ball
200012927	Filling and measuring tube, rNex
200011867	Forming tool for sample cups to form tin foil cups from tin foil
200006667	Funnel stainless steel
200010252	Funnel, D = 65 mm
200006785	Gloves, temperature resistant, 1 pair
200007483	Leakage check kit rapid N exceed
200005162	Leather gloves, 1 pair
200010997	manpress-7mm-120pos Manual pressing tool, D = 7 mm - for manual compressing of samples for 120 position sample carousel. Suitable for boats up to 8 x 8 x 16 mm and foils up to 35 x 35 mm.
200004971	manpress-9mm-80pos Manual pressing tool, D = 9 mm - for manual compressing of samples for 80 position sample carousel. Suitable for foils up to 35 x 35 mm.

Nitrogen and protein analyzers

rapid N exceed®

Auxiliaries

Article No.	Article Description
200009549	manpress-10.5mm-60pos Manual pressing tool, D = 10.5 mm for manual compressing of samples for 60 position sample carousel. Suitable for foils up to 50 x 50 mm.
200009657	Manually operated drilling device for cleaning steel tubes
200013850	Sample plate for 24 samples, with cover
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g

TOC analyzers

Our TOC analyzers offer fast and easy determination of total organic carbon in water and solids. Packed with innovative technologies and features, the robust design guarantees highest possible uptime and unrivaled performance for routine operation.



acquray®

Performance in TOC analysis meets ease of use

Your benefits

- Highest sensitivity for precise measurement results: High injection volumes up to 40 ml and precise infrared detector
- Outstanding flexibility: Optionally available modules for TN and TP analysis in liquids and for TOC, ROC, and TIC analysis in solids
- Time-saving sample preparation: 111 position autosampler with automatic acidification for NPOC determination

Consumables Sets

Article No.	Article Description
200008156	acquray-TOC-4k Set of consumables acquray for approx. 4000 liquid samples C – contains all necessary consumables for approx. 4000 analyses of liquid samples (depending on sample weight and matrix).
100002025	acquray-wearparts Set of O rings and small wear parts acquray TOC

Chemicals & Reagents

Article No.	Article Description
200008689	Aquatak (drying agent), 50 g drying agent without indicator
200010160	Brass wool, 50 g
100002507	Cd-reductor, filled, conserved for acquray TN, in exchange with used reductor
200013169	Cotton wool, 50 g
200006776	Magnesium perchlorate, w. indicator, 50g Drying agent with indicator, 50g, dangerous goods packaging
200006308	Pt-catalyst, 1 % Pt, 25 g for TOC systems
200004827	Quartz wool, 10 g

Calibration Sets

Article No.	Article Description	Article No.	Article Description
200008494	acquray-cal-ext-TOC TOC calibration kit, low, extended, acquray TOC – certified 5-point calibration consisting of a blank, one 0.5 ppm, one 1 ppm, one 2 ppm, one 5 ppm, and one 10 ppm standard in 40 ml vials, preserved in H ₃ PO ₄ . Shelf life: max 8 weeks in fridge	200008324	acquray-cal-low-TOC TOC calibration kit, low, acquray TOC – certified 3-point calibration consisting of a blank, one 1 ppm, one 5 ppm, and one 10 ppm standard in 40 ml vials, preserved in H ₃ PO ₄ . Shelf life: max 8 weeks in fridge
200009456	acquray-cal-high-TOC TOC calibration kit, high, acquray TOC – certified 3-point calibration consisting of a blank, one 10 ppm, one 50 ppm, and one 100 ppm standard in 40 ml vials, preserved in H ₃ PO ₄ . Shelf life: max 8 weeks in fridge	200011465	acquray-sst-TOC TOC SST kit, acquray TOC – certified TOC standard kit for the system suitability test consisting of a blank, a 0.5 ppm sucrose standard (easy digestible) and a 0.5 benzoquinone standard (hard digestible) in 40 ml vials, preserved in H ₃ PO ₄ . Shelf life: max 8 weeks in fridge

TOC analyzers

acquray®

Calibration Sets

Article No.	Article Description	Article No.	Article Description
200008022	acquray-std-100ppm-TOC Certified 100 ppm TOC standard, acquray TOC - 40 ml vial, unpreserved Shelf life: max 8 weeks in fridge	200006466	std-calciumcarbonate Calcium carbonate - 10 g
200014288	acquray-std-10ppm-TOC Certified 10 ppm TOC standard, acquray TOC - 40 ml vial, preserved in H ₃ P ₀ ₄ Shelf life: max 8 weeks in fridge	200009208	std-KHP Potassium hydrogen phthalate - 10 g
200004202	acquray-std-1ppm-TOC Certified 1 ppm TOC standard, acquray TOC - 40 ml vial, preserved in H ₃ P ₀ ₄ Shelf life: max 8 weeks in fridge	200007465	std-sodiumcarbonate Sodium carbonate - 10 g
200013513	acquray-std-blk-TOC Certified TOC blank, acquray TOC - 40 ml vial, preserved in H ₃ P ₀ ₄ Shelf life: max 8 weeks in fridge	200013228	std-soil-lowTOC Soil standard, 30 g - approx. 1.5 % C, can differ slightly depending on batch.
		200010890	sTOCcu-std-tempcontrol DIN control standard DIN 19539 - 30 g, Standard for system control. Standard contains defined amounts of different carbon fractions to ensure the correct operation of the temperature ramping program.

Sample Handling

Article No.	Article Description
100001407	acquray-injneedle-septum Suction needle acquray TOC - for use with vial septum
100001408	acquray-injneedle-std Suction needle acquray TOC - for standard use cases
100001409	acquray-purgneedle Purging cannula, cpl. acquray
200009438	acquray-TNTP-pumptubes Set of pump tubes - contains the three pump tubes for C, R1, R2 of the acquray TN or acquray TP module.
200011728	Magnetic stir bar 15 x 6 mm

Sampling & Sample Containers

Article No.	Article Description
200011783	Cap with septum 1.6 mm for 40 ml sample vial, 100 pc./package
200008484	Cover foil, 1500 pc./package
200014184	Crucible, quartz glass, f. acquray solid
200004322	Crucible, steel, f. acquray solid
200004738	Sample vials 40 ml, 100 pc./package
100001412	screw cap GL 45, drilling only
200007697	screw cap, cap GL 45 w. screw connection

Reaction Tubes & Accessories

Article No.	Article Description
200014102	Bottle, 1000 ml
100003176	Cd-reductor, filled, conserved (new)
100000893	Glass tube GL 25; compl.
200005292	Reactor, solids

TOC analyzers

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Spare Parts

Article No.	Article Description
200014836	Fitting 1/8", L = 12 mm
200006829	Gasket, blue
200012903	Gasket, yellow
200011613	Screw coupling 1/16", special material L = 9 mm
200015536	Screw coupling 1/16", special material L = 12 mm
200007272	Screw coupling, 1/8", L = 9 mm
200012574	Sealing plug, black, GL 14

Wear Parts

Article No.	Article Description
200015336	acquray-TOC-maint Maintenance kit for acquray TOC - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
100002117	Hose pipe no. 4
100002121	Hose pipe no. 7
100002123	Hose pipe no. 9
100002125	Hose pipe no. 11
100001381	Hose pipe no. 33
100001382	Hose pipe no. 34
100001383	Hose pipe no. 35
100001384	Hose pipe no. 36
100001385	Hose pipe no. 37
100001386	Hose pipe no. 38
100001387	Hose pipe no. 39
100001388	Hose pipe no. 40
100002806	Hose pipe no. 48 or-or for acquray TN/TP
100002807	Hose pipe no. 49 or-sw for acquray TN/TP
100002808	Hose pipe no. 50 sw-sw for pump acquray TN/TP
100001391	Hose pipe no. 50, acquray TOC
200014157	O-ring, green, 2.57 x 1.78 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006004	O-ring, green, 7.5 x 2.5 mm
200007904	O-ring, green, 16 x 3 mm
200006884	O-ring, red, 10 x 2.8 mm
200005999	Quad-ring, black, 7.65 x 1.78 mm
100000842	Sealing plug, bottom
100000843	Sealing plug, top

TOC analyzers

acquray®

Auxiliaries

Article No.	Article Description
100002519	Bottle 500 ml, brown glass with special cap
100003301	Bottle 500 ml, clear glass
100001389	Bottle, square, 1000 ml, brown glass
100003292	Disposable syringe for cleaning
200015256	Filter, diameter 18 mm
200005434	Froceps, soldered
200006785	Gloves, temperature resistant, 1 pair
100001372	Leak finding set, acquray TOC
200005162	Leather gloves, 1 pair
200009750	Sample tray for 12 samples
200006018	Tube rack to store cold/hot reaction tubes.
200005833	Vacuum grease, 2 g

TOC analyzers



enviro TOC

TOC analysis of environmental water and wastewater at its best

Your benefits

- Full recovery of even the most stable compounds: High-temperature combustion furnace with flexibly adjustable temperatures
- Precise results with no carryover: Autosampler optimized for particle-containing samples
- Highest sample flexibility: Analyze liquid and solid samples in a single instrument
- Long instrument life and low cost of ownership: SALTTRAP protects combustion tube and catalyst

Chemicals & Reagents

Article No.	Article Description
200008689	Aquatak (drying agent), 50 g drying agent without indicator
200010160	Brass wool, 50 g
200013646	Cerium (IV)oxide (granular) 30 ml
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200006776	Magnesium perchlorate, w. indicator, 50g Drying agent with indicator, 50g, dangerous goods packaging
200006308	Pt-catalyst, 1 % Pt, 25 g for TOC systems
200007521	Quartz chips, 2 - 4 mm, 50 g
200004827	Quartz wool, 10 g
200007065	eTOC-4k-CN-liquid Set of consumables enviro TOC for approx. 4000 liquid analyses CN - contains all necessary consumables for approx. 4000 analysis for C+N in liquid mode. The exact number of possible analysis is matrix dependent. The drying agent has to be ordered separately on demand.
200014384	eTOC-10k-CN-liquid Set of consumables enviro TOC for approx. 10 000 liquid analyses CN - contains all necessary consumables for approx. 10 000 analysis for C+N in liquid mode. The exact number of possible analysis is matrix dependent. The drying agent has to be ordered separately on demand.
200013529	eTOC-4k-C-solid Set of consumables enviro TOC for approx. 4000 solid samples C - contains all necessary consumables for approx. 4000 solid samples. Drying agent and silver wrapping material for TOC analysis needs to be ordered separately.

Calibration Sets

Article No.	Article Description	Article No.	Article Description
200006466	std-calciumcarbonate Calcium carbonate - 10 g	200006434	TOC-cal-high TOC calibration kit, high, vario TOC cube / vario TOC select / enviro TOC - certified 3-point calibration consisting of a blank, one 10 ppm, one 50 ppm, and one 100 ppm standard in 40 ml vials, preserved in HCl. Shelf life: max 8 weeks in fridge
200009208	std-KHP Potassium hydrogen phthalate - 10 g	200012582	TOC-cal-low TOC calibration kit, low, vario TOC cube / enviro TOC - certified 3-point calibration consisting of a blank, one 1 ppm, one 5 ppm, and one 10 ppm standard in 40 ml vials, preserved in HCl, shelf life: max 8 weeks in fridge
200007465	std-sodiumcarbonate Sodium carbonate - 10 g		
200013228	std-soil-lowTOC Soil standard, 30 g - approx. 1.5 % C, can differ slightly depending on batch.		
200004813	TOC-cal-ext TOC calibration kit, low, extended, vario TOC cube / vario TOC select / enviro TOC - certified 5-point calibration consisting of a blank, one 0.5 ppm, one 1 ppm, one 2 ppm, one 5 ppm, and one 10 ppm standard in 40 ml vials, pre-served in HCl, shelf life: max 8 weeks in fridge		

TOC analyzers

enviro TOC

Calibration Sets

Article No.	Article Description	Article No.	Article Description
200004552	TOC-std-100ppm Certified 100 ppm TOC standard, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, unpreserved, shelf life: max 8 weeks in fridge	200009701	TOC-std-1ppm Certified 1 ppm TOC standard, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, pre-served in HCl, shelf life: max 8 weeks in fridge
200008247	TOC-std-10ppm Certified 10 ppm TOC standard, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, pre-served in HCl, shelf life: max 8 weeks in fridge	200011245	TOC-std-blk Certified TOC blank, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, preserved in HCl, shelf life: max 8 weeks in fridge

Sample Handling

Article No.	Article Description
100006187	eTOC-acidneedle Acidification needle, complete enviro TOC – for NPOC measurement with autosampler
100006184	eTOC-injneedle-septum Injection needle enviro TOC – for use with vial septum
100006185	eTOC-injneedle-std Injection needle, standard, complete – enviro TOC
100006186	eTOC-purgneedle Purging needle, complete enviro TOC – for NPOC measurement with autosampler
200011728	Magnetic stir bar 15 x 6 mm
100001879	Suction needle compl., platinum for special use cases

Sampling & Sample Containers

Article No.	Article Description
200011783	Cap with septum 1.6 mm for 40 ml sample vial, 100 pc./package
200008484	Cover foil, 1500 pc./package
200007795	Erlenmeyer flask, 250 ml
200004738	Sample vials 40 ml, 100 pc./package
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)

TOC analyzers

enviro TOC

Sampling & Sample Containers

Article No.	Article Description
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200008184	Tin capsules, V = 0,1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc. Tin foil for elemental analysis – 35 x 35 mm, 450 pc./package
200011221	Tin foil, 50 x 50 mm, 450 pc. Tin foil for elemental analysis – 50 x 50 mm, 450 pc./package

Reaction Tubes & Accessories

Article No.	Article Description
200014796	Ash crucible, quartz, slotted dependent. The drying agent has to be ordered separately on demand.
200014555	Ash finger, 60 mm, slotted contains all necessary consumables for approx. 10 000 analysis for C+N
200005183	Cannula, 0.5 mm
200007844	Combustion / reduction tube (quartz)
200011489	Drying tube, L = 348 mm
200006025	Filter tube, 38 mm compl. with connection – hose pipe
100005274	Glass cooler, compl. for enviro TOC
100004670	Glass tube GL25, compl., L = 348 mm for enviro TOC
200014026	Protective tube, 105 mm, slotted
200004918	Sparger, compl.

Spare Parts

Article No.	Article Description
200006829	Gasket, blue
200012903	Gasket, yellow
200013142	Sealing 1/8", for cannula
200010811	Set of half shells 14 mm
200007950	Syringe, 5 ml

TOC analyzers

enviro TOC

Wear Parts

Article No.	Article Description
200008691	eTOC-maint Maintenance kit for enviro TOC - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
100006171	eTOC-wearparts Set of O rings/small wear parts for enviro TOC
200008314	O-ring, green, 4.5 x 1.5 mm
200012426	O-ring, green, 5 x 2 mm
200009016	O-ring, green, 10.5 x 2 mm
200007904	O-ring, green, 16 x 3 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200009360	Sealing plug

Auxiliaries

Article No.	Article Description
100001389	Bottle, square, 1000 ml, brown glass
200005689	Crucible tongs for change of ash fingers
200010252	Funnel, D = 65 mm
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
100005780	Leak finding set enviro TOC
200005162	Leather gloves, 1 pair
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes.
200010676	Tweezers, L = 145 mm
200005833	Vacuum grease, 2 g

TOC analyzers



soli TOC[®] cube

Flexible temperature-dependent differentiation of carbon in solids

Your benefits

- Unmatched analytical performance: Limit of detection (LOD) of 10 ppm or < 15 µg C
- Fast and easy analyses: Autosampler for 24/7 operation and automated ash removal
- Simplified sample preparation: Minimized efforts thanks to advanced crucible technology

Consumables Sets

Article No.	Article Description
200013766	sTOCcu-4k Set of consumables soli TOC cube for approx. 4000 solid samples – contains all necessary consumables for approx. 4000 analyses (depending on sample weight and matrix).
100001251	sTOCcu-crucisol-cera Ceramic crucibles – 100 pc./package for soli TOC cube
100000586	sTOCcu-crucisol-steel Steel crucibles – 100 pc./package for soli TOC cube

Chemicals & Reagents

Article No.	Article Description
200008689	Aquatak (drying agent), 50 g drying agent without indicator
200010160	Brass wool, 50 g
200010245	Corundum balls, 50 g
200013169	Cotton wool, 50 g
200006776	Magnesium perchlorate, w. indicator, 50g Drying agent with indicator, 50g, dangerous goods packaging
200006308	Pt-catalyst, 1 % Pt, 25 g for TOC systems
200004827	Quartz wool, 10 g

Calibration Sets

Article No.	Article Description	Article No.	Article Description
200006466	std-calciumcarbonate Calcium carbonate – 10 g	200013228	std-soil-lowTOC Soil standard, 30 g – approx. 1.5 % C, can differ slightly depending on batch.
200005305	std-soil-2.1 Soil standard 2.1 (30 g), ~1 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.	100003797	sTOCcu-cal-C Standard calibration set soli TOC cube, carbon
200014800	std-soil-2.4 Soil standard 2.4 (30 g), ~3 % C, ~0.2 % N, ~0.03 % S, composition is batch dependent.	200010890	sTOCcu-std-tempcontrol DIN control standard DIN 19539 – 30 g, Standard for system control. Standard contains defined amounts of different carbon fractions to ensure the correct operation of the temperature ramping program.
200006419	std-soil-5M Soil standard 5M (30 g), ~2 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.		

TOC analyzers

solⁱ TOC[®] cube

Reaction Tubes & Accessories

Article No.	Article Description
200015419	Combustion tube, CNS, vMAXcu and sTOCcu
200015272	Drying tube - GL14 and pan
200011409	Glass tube GL25, long
200006003	Glass tube, L = 348 mm

Spare Parts

Article No.	Article Description
200012903	Gasket, yellow
200008514	Pressure jacket, GL 14
200005999	Quad-ring, black, 7.65 x 1.78 mm
200012574	Sealing plug, black, GL 14
200006143	Shaft sealing

Wear Parts

Article No.	Article Description
200014191	O-ring, black, 7.59 x 2.62 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200006004	O-ring, green, 7.5 x 2.5 mm
200007904	O-ring, green, 16 x 3 mm
200011057	O-ring, green, 25 x 2 mm
200014284	O-ring, red, 6 x 2 mm
200010589	O-ring, red, 7 x 1.5 mm
200008068	O-ring, red, 32 x 3 mm
200009183	sTOCcu-maint Maintenance kit for soli TOC cube - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
100002302	sTOCcu-wearparts Set of o rings and small wear parts soli TOC cube

Auxiliaries

Article No.	Article Description	Article No.	Article Description
200014860	Adjustment tool for sample holder	100001108	Gripper arm with inlet, soli TOC cube
200013405	Clamp (glass tube)	200011113	Leakage set vMAXcu, sTOCcu, rNex for vario MAX cube, soli TOC cube or rapid MAX N exceed
200014382	Clamp, large	200005162	Leather gloves, 1 pair
200014254	Clamp, small	200010238	Sample tray for 18 samples
200005434	Froceps, soldered	200015017	Stuffing tool
200010252	Funnel, D = 65 mm	200006018	Tube rack to store cold/hot reaction tubes.
200014862	Funnel, GL 18	200006998	Vacuum grease, 35 g
200006785	Gloves, temperature resistant, 1 pair		

TOC analyzers



vario TOC cube

TOC/TN_x analysis without limitations

Your benefits

- Extremely versatile: Customizable to meet your analytical needs
- High sensitivity: Exceptionally stable measurement results even in the lower ppb range
- Highest sample flexibility: Analyze liquid and solid samples in a single instrument
- Long instrument life and low cost of ownership: SALTTRAP protects combustion tube and catalyst

Chemicals & Reagents

Article No.	Article Description
200004773	Aluminium oxide wool, 20 g
200008689	Aquatak (drying agent), 50 g drying agent without indicator
200010160	Brass wool, 50 g
200013646	Cerium (IV)oxide (granular) 30 ml
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200004784	Grease paste, 2 g, for syringe spindle
200006776	Magnesium perchlorate, w. indicator, 50g Drying agent with indicator, 50g, dangerous goods packaging
200006308	Pt-catalyst, 1 % Pt, 25 g for TOC systems
200007521	Quartz chips, 2 - 4 mm, 50 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g
200015214	vTOCcu-10k-CN-liquid Set of consumables vario TOC cube for approximately 10000 liquid samples - includes all necessary consumables for approx. 10000 liquid samples.
200009443	vTOCcu-2k-C-solid Set of consumables vario TOC cube for approx. 2000 solid samples C - contains all necessary consumables for approx. 2000 solid samples. Drying agent and silver wrapping material for TOC analysis needs to be ordered separately.
200010729	vTOCcu-3k-CN-liquid Set of consumables vario TOC cube for approx. 3000 liquid samples CN
200004180	vTOCcu-5k-C-solid Set of consumables vario TOC cube for approx. 5000 solid samples C - contains all necessary consumables for approx. 5000 solid samples. Drying agent and silver wrapping material for TOC analysis need to be ordered separately.

Calibration Sets

Article No.	Article Description	Article No.	Article Description
200006466	std-calciumcarbonate Calcium carbonate - 10 g	200004813	TOC-cal-ext TOC calibration kit, low, extended, vario TOC cube / vario TOC select/enviro TOC - certified 5-point calibration consisting of a blank, one 0.5 ppm, one 1 ppm, one 2 ppm, one 5 ppm, and one 10 ppm standard in 40 ml vials, pre-served in HCl, shelf life: max 8 weeks in fridge
200009208	std-KHP Potassium hydrogen phthalate - 10 g		
200007465	std-sodiumcarbonate Sodium carbonate - 10 g		
200013228	std-soil-lowTOC Soil standard, 30 g - approx. 1.5 % C, can differ slightly depending on batch.		

TOC analyzers vario TOC cube

Calibration Sets

Article No.	Article Description	Article No.	Article Description
200006434	TOC-cal-high TOC calibration kit, high, vario TOC cube / vario TOC select / enviro TOC – certified 3-point calibration consisting of a blank, one 10 ppm, one 50 ppm, and one 100 ppm standard in 40 ml vials, preserved in HCl, shelf life: max 8 weeks in fridge	200004552	TOC-std-100ppm Certified 100 ppm TOC standard, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, unpreserved, shelf life: max 8 weeks in fridge
200012582	TOC-cal-low TOC calibration kit, low, vario TOC cube / enviro TOC – certified 3-point calibration consisting of a blank, one 1 ppm, one 5 ppm, and one 10 ppm standard in 40 ml vials, preserved in HCl, shelf life: max 8 weeks in fridge	200008247	TOC-std-10ppm Certified 10 ppm TOC standard, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, preserved in HCl, shelf life: max 8 weeks in fridge
200013675	TOC-sst TOC SST kit, vario TOC cube / enviro TOC – certified TOC standard kit for the system suitability test consisting of a blank, a 0.5 ppm sucrose standard (easy digestible) and a 0.5 benzoquinone standard (hard digestible) in 40 ml vials, preserved in HCl, shelf life: max 8 weeks in fridge	200009701	TOC-std-1ppm Certified 1 ppm TOC standard, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, preserved in HCl, shelf life: max 8 weeks in fridge
		200011245	TOC-std-blk Certified TOC blank, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, preserved in HCl, shelf life: max 8 weeks in fridge

Sample Handling

Article No.	Article Description
200011728	Magnetic stir bar 15 x 6 mm
100001879	Suction needle compl., platinum for special use cases

Sampling & Sample Containers

Article No.	Article Description
200008484	Cover foil, 1500 pc./package
200007795	Erlenmeyer flask, 250 ml
200014608	Purge needle
200004738	Sample vials 40 ml, 100 pc./package
200007327	Sample vials, 12 ml, 100 pc./package
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200010032	Suction needle for standard use cases

TOC analyzers vario TOC cube

Sampling & Sample Containers

Article No.	Article Description
200011680	Suction needle, septum for use with vial septum
200012399	Test tubes 100 pc/package
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200008184	Tin capsules, V = 0,1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc. Tin foil for elemental analysis – 35 x 35 mm, 450 pc./package
200011221	Tin foil, 50 x 50 mm, 450 pc. Tin foil for elemental analysis – 50 x 50 mm, 450 pc./package
200005202	Vials, 8 ml, 200 pc./package

Reaction Tubes & Accessories

Article No.	Article Description
200006378	Acid reservoir, L = 300 mm
200014796	Ash crucible, quartz, slotted
200014555	Ash finger, 60 mm, slotted
200005183	Cannula, 0.5 mm
200007844	Combustion / reduction tube (quartz)
200013456	Drying tube, 300 mm glass tube only!
200013977	Filter tube 42 mm compl. incl. grey caps, seal and silver wool filling
200013470	Filter tube, 38 mm
200006025	Filter tube, 38 mm compl. with connection – hose pipe
200007012	filter tube, 42 mm glass tube with grey caps, only. WITHOUT filling
200011827	Filter tube, with connector
200005233	Glass cooler, straight the glass part, only
200009425	Glass cooler, straight, compl.
200008714	Glass tube, L = 300 mm
200014026	Protective tube, 105 mm, slotted
200012805	Reservoir compl.
200012079	Slide ring
200010447	Sparger tube
200004918	Sparger, compl.

TOC analyzers

vario TOC cube

Spare Parts

Article No.	Article Description
20001438	Ball for ball valve, 14 mm blind hole
200014836	Fitting 1/8", L = 12 mm
200006829	Gasket, blue
200012903	Gasket, yellow
200005999	Quad-ring, black, 7.65 x 1.78 mm
200015536	Screw coupling 1/16", special material L = 12 mm
200013142	Sealing 1/8", for cannula
200008708	Sealing plug for 1/16" hose pipe
200012574	Sealing plug, black, GL 14
200010811	Set of half shells 14 mm
200007950	Syringe, 5 ml
200008312	Water trap

Wear Parts

Article No.	Article Description
200009233	APNA-CLD-maint Maintenance kit for APNA 370 - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200014191	O-ring, black, 7.59 x 2.62 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200012426	O-ring, green, 5 x 2 mm
200009016	O-ring, green, 10.5 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200009360	Sealing plug
200006729	Syringe piston, compl., 10 mm
200011127	vTOCcu-maint Maintenance kit for vario TOC cube - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200012643	vTOCcu-maint-spare Spare part kit for vario TOC cube - contains all spare parts which have to be exchanged in conjunction with a maintenance call.
200011955	vTOCcu-wearparts Set of O-rings/ small wear parts for vario TOC and iso TOC instruments.

Auxiliaries

Article No.	Article Description	Article No.	Article Description
200014382	Clamp, large	200005162	Leather gloves, 1 pair
200014254	Clamp, small	200010100	Micro spatula
200005689	Crucible tongs for change of ash fingers	200013850	Sample plate for 24 samples, with cover
200015256	Filter, diameter 18 mm	200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200010252	Funnel, D = 65 mm	200010676	Tweezers, L = 145 mm
200004594	Funnel, GL 14	200005833	Vacuum grease, 2 g
200006785	Gloves, temperature resistant, 1 pair		
200006791	Leak finding set vTOCcu/ isoTOC for vario TOC cube / isoTOC / vario TOC select		

Inorganic elemental analyzers

Our instruments are designed for delivering highly precise analysis results with easy handling and low maintenance without tedious cleaning. The user-friendly, intuitive software and the tool-free maintenance make the operation of the instruments very easy. The fully automated autosampler enables you, as the user, to spend more time with other tasks. The smart design guarantees highest possible uptime for R&D, routine and high-throughput operation.



inductar® CS cube

Advanced carbon and sulfur analysis of inorganic materials

Your benefits

- Reduced time requirements: Minimal cleaning efforts due to efficient design
- Comfortable, fast analyses: Easy handling and low maintenance
- Maximized sample flexibility: Detection of the whole concentration range
- Increased efficiency: Reliable, unattended 24/7 analyses

Chemicals & Reagents

Article No.	Article Description
200013014	cons-anhydrone Anhydrone, 454 g - drying agent
200007555	cons-antimony Antimony, 200 g - Filling for intrap-Cl
200006430	cons-ddpa 2,4-dinitrodiphenylamine, 50 g - Filling for intrap-F
200012348	cons-potassiumiodide Potassium iodide, 225 g - Filling for intrap-Cl
200010808	Coolant, 1 l for inductar
200013169	Cotton wool, 50 g
200005089	DESULF, Füllmaterial SO ₃ Falle, 454 g optimized for high cycle number of CS analyses
200011112	EAS OXYCAT, CO, SO ₂ oxidation catalyst for CS mode, 15 g; optimized for high cycle number of CS analyses
100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g
200009122	EXACC, Accelerator for CS analysis 1360g optimized for carbon analysis in inorganic materials
200014100	EXACC, Accelerator for CS analysis 2270g optimized for reliable combustion of inorganic materials
200013724	EXACC, Accelerator for CS analysis, 750g optimized for reliable combustion of inorganic materials
200006402	EXACC, Accelerator for CS analysis, 908g optimized for reliable combustion of non-ferrous metals and other inorganic materials
200013565	inCScu-4k inductar CS cube, set of consumables - includes all necessary consumables, exclusive of drying agent, for approx. 4000 CS analyses.
200004827	Quartz wool, 10 g
200008461	Schuetze reagent, 100 g
200005872	Silver wool, 50 g

Calibration Sets

Article No.	Article Description
200006300	inCScu-cal-highC Calibration kit inductar CS - C: 2-5 % and S: 0-0.2 %

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Calibration Sets

Article No.	Article Description
200008258	inCScu-cal-lowC Calibration kit inductar CS - C: 0-0.4 % and S: 0-0.2 %
200010722	inCScu-cal-midC Calibration kit inductar CS - C: 0-2 % and S: 0-0.2 %
200011389	std-bariumsulfate Barium sulfate - 10 g
200006466	std-calciumcarbonate Calcium carbonate - 10 g
200009007	std-calciumsulfate Calcium sulfate - 10 g

Measurement Standards & Reference Materials

Article No.	Article Description
200013000	Standard iron C: 4.0 % / S: 0.05 % cast iron chips, 100 g
200007222	Standard iron C: 4.8 % / S: 0.004 % cast iron chips, 100 g
200008180	Standard steel C: 0.002 % / S: 0.003 % steel chips, 100 g
200004175	Standard steel C: 0.02 % / S: 0.0002 % steel chips, 100 g
200012834	Standard steel C: 0.06 % / S: 0.02 % steel chips, 100 g
200009835	Standard steel C: 0.2 % / S: 0.1 % steel chips, 100 g
200011154	Standard steel C: 0.4 % / S: 0.2 % steel chips, 100 g
200004597	Standard steel C: 1.1 % / S: 0.01 % steel chips, 100 g
200011845	Standard steel C: 1.3 % / S: 0.01 % steel chips, 100 g
200012222	Standard steel C: 2.1 / S: 0.01 steel chips, 100 g
200004347	Standard tungsten carbide C: 6.2 % WC, 100 g

Sampling and Sample Containers

Article No.	Article Description
100000580	ELCUP, 1000 ceramic crucibles for CS Al-foil wrapped
100001954	Waste container for used single graphite crucible

Reaction Tubes & Accessories

Article No.	Article Description
100000245	Combustion tube, 32 mm
100000246	Dust filter tube
100000465	Glass tube GL25; L = 140 mm
100000371	Nozzle
100000244	Oxidation tube
200014236	Plug oxidation/ reduction tube ID 14 mm

Peripherhal Items

Article No.	Article Description
200009245	inCScu-O2pur O2 lab gas purifier - for H2o and CO, CO2, CnHm C > C5

Inorganic elemental analyzers

inductar® CS cube

Spare Parts

Article No.	Article Description
100008084	Gripper
200005999	Quad-ring, black, 7.65 x 1.78 mm
200006143	Shaft sealing

Wear Parts

Article No.	Article Description
100001270	Filter tube; with silver wool
20001105	Hose pipe, silicon, transparent
200008755	inCScu-maint Maintenance kit for inductar CS cube – contains all wear parts which have to be exchanged in conjunction with a maintenance call.
100000491	inCScu-wearparts Set of O-rings and small wear parts for inductar CS
200011633	O-ring, black, 4 x 1 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200009016	O-ring, green, 10.5 x 2 mm
200007904	O-ring, green, 16 x 3 mm
100000341	O-ring, green, 19.5 x 2,5 mm
100000331	O-ring, green, 24.5 x 3 mm
200015449	O-ring, green, 25 x 2 mm
200010589	O-ring, red, 7 x 1.5 mm
200008068	O-ring, red, 32 x 3 mm

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200010529	Crucible tongs
200004594	Funnel, GL 14
100000594	Glass bottle and hose for change of coolant
200006785	Gloves, temperature resistant, 1 pair
100000473	Gripper brush mode CS for 3 finger gripper (CS)
100000470	Hose pipe, L = 10 m d(o) = 8 mm; d(i) = 6 mm
200011411	inCScu-sampletray-cera Ceramic sample tray – heat resistant, for lab furnace 1200°C
100003801	indu-sampletray Sample tray, inductar CS cube – sample tray for transport of ceramic crucibles for inductar CS cube not heat resistant
100003269	indu-sampletray-wcov Sample tray inductar CS, with cover
100000492	Leak detection set, inductar

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Auxiliaries

Article No.	Article Description
200005162	Leather gloves, 1 pair
200010100	Micro spatula
100000484	Sample tray CS mode for ceramic crucibles for CS analysis (non heat resistant)
100000477	Scoop FE for 0.5 g EXACC FE
100000480	Scoop WS 1 for 1 g EXACC WS
200007700	spiral drill, 0.8 mm for nozzle cleaning
200015017	Stuffing tool
200011912	Tool holding device, 100 mm for spiral drill (200007700)
200006018	Tube rack to store cold/hot reaction tubes.
200006998	Vacuum grease, 35 g
200005843	Weighing spatula

Inorganic elemental analyzers



inductar® EL cube

Time to rethink nitrogen and protein analysis

Your benefits

- Fast analysis: Results in less than 4 minutes
- Lowest cost per sample: CO₂ as carrier gas and less consumables consumption thanks to EAS REGAINER® technology
- Space-saving: Smallest footprint available

Consumables Sets

Article No.	Article Description
200010121	indu-adap Crucible adapter set inductar; 10 pc.
200013504	indu-tin-cap-add-4k Additional tin additive (tin capsules) for hot gas extraction analysis of 4000 powder samples with nickel baskets
200013088	indu-tin-pel-add-4k Set of high purity tin flux (0.2 g pellets) for the analysis > 4000 ONH analyses.

Chemicals & Reagents

Article No.	Article Description
200013014	cons-anhydrone Anhydrone, 454 g - drying agent
200007555	cons-antimony Antimony, 200 g - Filling for intrap-Cl
200006430	cons-ddpa 2,4-dinitrodiphenylamine, 50 g - Filling for intrap-F
200012348	cons-potassiumiodide Potassium iodide, 225 g - Filling for intrap-Cl
200010808	Coolant, 1 l for inductar
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200013169	Cotton wool, 50 g
200005089	DESULF, Füllmaterial SO ₃ Falle, 454 g optimized for high cycle number of CS analyses
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 pieces per pack, granular, free-flowing, 30 g
200011112	EAS OXYCAT, CO, SO ₂ oxidation catalyst for CS mode, 15 g; optimized for high cycle number of CS analyses
100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g
200009122	EXACC, Accelerator for CS analysis 1360g optimized for carbon analysis in inorganic materials
200014100	EXACC, Accelerator for CS analysis 2270g optimized for reliable combustion of inorganic materials
200013724	EXACC, Accelerator for CS analysis, 750g optimized for reliable combustion of inorganic materials
200006402	EXACC, Accelerator for CS analysis, 908g optimized for reliable combustion of non-ferrous metals and other inorganic materials
100001467	Graphite felt 10 pc.
200013565	inCScu-4k inductar CS cube, set of consumables - includes all necessary consumables, exclusive of drying agent, for approx. 4000 CS analyses.

Inorganic elemental analyzers

inductar® EL cube

Chemicals & Reagents

Article No.	Article Description
200009286	indu-car-pow-add Graphite powder 99.9 % purity; 100 g – Graphite powder as additive for ONH analyses in order to generate a better release of the elements to be analyzed. Use recommended for analyses of refractory metals. Recommended to be used wrapped in tin.
200005094	indu-Ni-add Nibbled nickel accelerator, 100 g – Nibbled nickel accelerator, low oxygen, 100 g
200013090	indu-tin-capsule tin capsules; 5 x 13mm – 100 ps. for inductar ONH cube
200009419	inELcu-4k inductar EL cube, set of consumables – includes all necessary consumables, exclusive of drying agent, for approx. 2000 CS and 2000 ONH analyses.
200007986	inONHcu-ONH-4k Set of consumables for approx. 4000 standard solid samples – contains all necessary consumables, exclusive of drying agent, for approx. 4000 ONH analyses.
200004827	Quartz wool, 10 g
200008461	Schuetze reagent, 100 g
200005872	Silver wool, 50 g
200009010	Tin foil cups, 35 x 35 mm, 100 pc.

Calibration Sets

Article No.	Article Description
200006300	inCScu-cal-highC Calibration kit inductar CS – C: 2-5 % and S: 0-0.2 %
200008258	inCScu-cal-lowC Calibration kit inductar CS – C: 0-0.4 % and S: 0-0.2 %
200010722	inCScu-cal-midC Calibration kit inductar CS – C: 0-2 % and S: 0-0.2 %
200008451	inONHcu-cal-H Calibration kit inductar ONH – H Concentration range H approximately 1 – 7 ppm
200011389	std-bariumsulfate Barium sulfate – 10 g
200006466	std-calciumcarbonate Calcium carbonate – 10 g
200009007	std-calciumsulfate Calcium sulfate – 10 g

Measurement Standards & Reference Materials

Article No.	Article Description
200007756	CRM H in steel (appr. 1 ppm H) Certified reference material H in steel, approximately 1 ppm hydrogen – 1 g / pin
200015115	CRM H in steel (appr. 2.5 ppm H) Certified reference material H in steel, approximately 2.5 ppm hydrogen – 1 g / pin
200014321	CRM O, N in steel (O 10 ppm, N 750 ppm) Certified reference material O, N in steel, approximately 10 ppm oxygen and approximately 750 ppm nitrogen – 1 g / pin

Inorganic elemental analyzers

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Measurement Standards & Reference Materials

Article No.	Article Description
200014646	CRM O, N in steel (0 100 ppm, N 102 ppm) Certified reference material O, N in steel, approximately 100 ppm oxygen and approximately 102 ppm nitrogen – 1 g / pin
200010006	CRM O, N in steel (0 1600ppm, N 2200ppm) Certified reference material O, N in steel, approximately 1600 ppm oxygen and approximately 2200 ppm nitrogen – 0.5 g / pin 100 pins / pack
200008759	CRM O, N in steel (0 30 ppm, N 1800 ppm) Certified reference material O, N in steel, approximately 30 ppm oxygen and approximately 1800 ppm nitrogen – 1 g / pin
200010425	CRM O, N in steel (0 30 ppm, N 530 ppm) Certified reference material O, N in steel, approximately 30 ppm oxygen and approximately 530 ppm nitrogen – 1 g / pin
200014580	CRM O, N in steel (0 7 ppm, N 30 ppm) Certified reference material O, N in steel, approximately 7 ppm oxygen and approximately 30 ppm nitrogen – 1 g / pin
200006519	CRM ONH in titanium Certified reference material O, N and H in titanium, 0.1 g / pin H appr. 40 ppm, O appr. 2000 ppm, N appr. 300 ppm 100 pins / package
200009393	CRM ONH in titanium Certified reference material O, N and H in titanium, approximately 115 ppm oxygen, 60 ppm nitrogen, and 150 ppm hydrogen – 0.1 g/pin
200013000	Standard iron C: 4.0 % / S: 0.05 % cast iron chips, 100 g
200008180	Standard steel C: 0.002 % / S: 0.003 % steel chips, 100 g
200004175	Standard steel C: 0.02 % / S: 0.0002 % steel chips, 100 g
200012834	Standard steel C: 0.06 % / S: 0.02 % steel chips, 100 g
200009835	Standard steel C: 0.2 % / S: 0.1 % steel chips, 100 g
200011154	Standard steel C: 0.4 % / S: 0.2 % steel chips, 100 g
200004597	Standard steel C: 1.1 % / S: 0.01 % steel chips, 100 g
200011845	Standard steel C: 1.3 % / S: 0.01 % steel chips, 100 g
200012222	Standard steel C: 2.1 / S: 0.01 steel chips, 100 g
200004347	Standard tungsten carbide C: 6.2 % WC, 100 g
200013637	Test sample steel C: 0.06 % / S: 0.02 % Test sample: steel chips

Sampling and Sample Containers

Article No.	Article Description
100008324	crucible holder; compl.
100000580	ELCUP, 1000 ceramic crucibles for CS Al-foil wrapped
100002030	ELCUP, 500 graphite crucibles for ONH
200012416	Nickel baskets, 1.5 g 100 pc.
100002031	Sample holder, aluminum cup
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
100001954	Waste container for used single graphite crucible

Inorganic elemental analyzers

inductar® EL cube

Reaction Tubes & Accessories

Article No.	Article Description
100001465	Ceramic tube
100000245	Combustion tube, 32 mm
100000246	Dust filter tube
100001466	Extraction tube with water cooling
100000465	Glass tube GL25; L = 140 mm
100001486	Glass tube GL 14; compl. moistening EC sensor
100000466	Glass tube GL 25; compl.; L = 200 mm
100000371	Nozzle
100000244	Oxidation tube
200014236	Plug oxidation/ reduction tube ID 14 mm

Spare Parts

Article No.	Article Description
100008084	Gripper
100002741	Filter tube; GL 14; compl.
200005999	Quad-ring, black, 7.65 x 1.78 mm
100002026	Ronde D = 9 mm, stainless steel
200012948	Ronde, D = 9 mm, tin bronze
200006143	Shaft sealing

Wear Parts

Article No.	Article Description
100001270	Filter tube; with silver wool
100002076	Gasket, black
20001105	Hose pipe, silicon, transparent
200008230	inElcu-maint Maintenance kit for inductar EL cube - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
100004292	inELcu-wearparts Set of o-rings and small wear parts inductar EL cube
200011633	O-ring, black, 4 x 1 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200009016	O-ring, green, 10.5 x 2 mm
200007904	O-ring, green, 16 x 3 mm
100000341	O-ring, green, 19.5 x 2,5 mm
100000331	O-ring, green, 24.5 x 3 mm
200015449	O-ring, green, 25 x 2 mm
200010589	O-ring, red, 7 x 1.5 mm
200008068	O-ring, red, 32 x 3 mm
100002419	O-ring, white, 8.5 x 1.5 mm for sample holder

Inorganic elemental analyzers

inductar® EL cube

Auxiliaries

Article No.	Article Description
100001941	Box wrench for manual inductar cube sample feeder
200013405	Clamp (glass tube)
200014382	Clamp, large
200014254	Clamp, small
200010529	Crucible tongs
200004594	Funnel, GL 14
100000594	Glass bottle and hose for change of coolant
200006785	Gloves, temperature resistant, 1 pair
100000473	Gripper brush mode CS for 3 finger gripper (CS)
200009954	Gripper for changing crucible adapter
200012930	Gripper tool for changing ceramic tube
100000470	Hose pipe, L = 10 m d(o) = 8 mm; d(i) = 6 mm
200011411	inCScu-sampletray-cera Ceramic sample tray – heat resistant, for lab furnace 1200°C
100003801	indu-sampletray Sample tray, inductar CS cube – sample tray for transport of ceramic crucibles for inductar CS cube not heat resistant
100003269	indu-sampletray-wcov Sample tray inductar CS, with cover
100005133	inPress Nickel capsule press inPRESS – Nickel capsule press inPRESS for closing ELCAPS ONH nickel capsules for analyses with the inductar ONH cube and inductar EL cube. Particle-tight closing of the nickel capsules is recommended for powder samples and magnetic samples.
100000492	Leak detection set, inductar
200005162	Leather gloves, 1 pair
200004358	LED pocket lamp
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
100000477	Scoop FE for 0.5 g EXACC FE
100000480	Scoop WS 1 for 1 g EXACC WS
200010268	Socket key, L: 10 mm
200007700	spiral drill, 0.8 mm for nozzle cleaning
200007306	Spray bottle; 250 ml
200015017	Stuffing tool
200013203	Support rod, combustion tube, 110 mm
200014334	Telescope magnet
200011912	Tool holding device, 100 mm for spiral drill (200007700)
200006018	Tube rack to store cold/hot reaction tubes.
200006553	Tweezers for graphite crucible
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g
200005843	Weighing spatula

Inorganic elemental analyzers



inductar® ONH cube

Simultaneous ONH elemental analysis in metals and other inorganic materials

Your benefits

- Reduced time requirements: Minimal cleaning efforts due to efficient design
- Outstanding flexibility: Adaptable to fulfill your analytical needs due to the customizable instrument concept
- Minimal operational requirements: No need for external cooling or a high voltage power supply
- Increased efficiency: Easy handling and low maintenance

Consumables Sets

Article No.	Article Description
200010121	indu-adap Crucible adapter set inductar; 10 pc.
200008420	indu-cartin-add-4k Additional additives (tin foil and graphite powder) for hot gas extraction analysis of 4000 samples
200013504	indu-tin-cap-add-4k Additional tin additive (tin capsules) for hot gas extraction analysis of 4000 powder samples with nickel baskets
200013088	indu-tin-pel-add-4k Set of high purity tin flux (0.2 g pellets) for the analysis > 4000 ONH analyses.

Chemicals & Reagents

Article No.	Article Description
200013014	cons-anhydrone Anhydrone, 454 g – drying agent
200010808	Coolant, 1 l for inductar
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200014271	Copper, 100 g
200013169	Cotton wool, 50 g
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 pieces per pack, granular, free-flowing, 30 g
100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g
100001467	Graphite felt 10 pc.
200009286	indu-car-pow-add Graphite powder 99.9 % purity; 100 g – Graphite powder as additive for ONH analyses in order to generate a better release of the elements to be analyzed. Use recommended for analyses of refractory metals. Recommended to be used wrapped in tin.
200005094	indu-Ni-add Nibbled nickel accelerator, 100 g – Nibbled nickel accelerator, low oxygen, 100 g
200013090	indu-tin-capsule tin capsules; 5 x 13mm – 100 pc. for inductar ONH cube
200008578	inONHcu-H EC-4k Set of consumables for approx. 4000 standard solid samples for H-analysis with EHS – contains all necessary consumables for H-analysis with EHS detection (exclusively for the usage of only H-analysis with EHS with an inductar ONH cube), exclusive of drying agent, for approx. 4000 analyses. For powder samples additional tin capsules are needed.
200012460	inONHcu-OH-4k Set of consumables for approx. 4000 standard solid samples ONH / OH for the OH configuration of the inductar ONH cube – contains all necessary consumables, exclusive of drying agent, for approx. 4000 OH analyses. H analysis with TCD.

Inorganic elemental analyzers

inductar® ONH cube

Chemicals & Reagents

Article No.	Article Description
200009955	inONHcu-OH-4k-NiBas Set of consumables for approx. 4000 special samples ONH / OH for the OH configuration of the inductar ONH cube – Tailored for special applications, e.g. titanium alloys. Includes all necessary consumables, including Nickel baskets, exclusive of drying agent, for approx. 4000 OH analyses. H analysis with TCD.
200013248	inONHcu-ON-4k-NiBas Set of consumables for approx. 4000 special samples ONH / ON for the ON configuration of the inductar ONH cube – Tailored for special applications, e.g. titanium alloys. Includes all necessary consumables, including Nickel baskets, exclusive of drying agent, for approx. 4000 ON analyses.
200007986	inONHcu-ONH-4k Set of consumables for approx. 4000 standard solid samples – contains all necessary consumables, exclusive of drying agent, for approx. 4000 ONH analyses.
200006876	inONHcu-ONH-4k-NiBas Set of consumables for approx. 4000 special samples (e.g. Ti) – Tailored for special applications, e.g. titanium alloys. Includes all necessary consumables, including Nickel baskets, exclusive of drying agent, for approx. 4000 ONH analyses.
200004827	Quartz wool, 10 g
200008461	Schuetze reagent, 100 g
200005872	Silver wool, 50 g
200009010	Tin foil cups, 35 x 35 mm, 100 pc.

Calibration Sets

Article No.	Article Description
200008451	inONHcu-cal-H Calibration kit inductar ONH – H Concentration range H approximately 1 – 7 ppm

Measurement Standards & Reference Materials

Article No.	Article Description
200007756	CRM H in steel (appr. 1 ppm H) Certified reference material H in steel, approximately 1 ppm hydrogen – 1 g / pin
200015115	CRM H in steel (appr. 2.5 ppm H) Certified reference material H in steel, approximately 2.5 ppm hydrogen – 1 g / pin
200014321	CRM O, N in steel (O 10 ppm, N 750 ppm) Certified reference material O, N in steel, approximately 10 ppm oxygen and approximately 750 ppm nitrogen – 1 g / pin
200014646	CRM O, N in steel (O 100 ppm, N 102 ppm) Certified reference material O, N in steel, approximately 100 ppm oxygen and approximately 102 ppm nitrogen – 1 g / pin
200010006	CRM O, N in steel (O 1600ppm, N 2200ppm) Certified reference material O, N in steel, approximately 1600 ppm oxygen and approximately 2200 ppm nitrogen – 0.5 g / pin 100 pins / pack
200008759	CRM O, N in steel (O 30 ppm, N 1800 ppm) Certified reference material O, N in steel, approximately 30 ppm oxygen and approximately 1800 ppm nitrogen – 1 g / pin
200010425	CRM O, N in steel (O 30 ppm, N 530 ppm) Certified reference material O, N in steel, approximately 30 ppm oxygen and approximately 530 ppm nitrogen – 1 g / pin
200014580	CRM O, N in steel (O 7 ppm, N 30 ppm) Certified reference material O, N in steel, approximately 7 ppm oxygen and approximately 30 ppm nitrogen – 1 g / pin
200006519	CRM ONH in titanium Certified reference material O, N and H in titanium, 0.1 g / pin H appr. 40 ppm, O appr. 2000 ppm, N appr. 300 ppm 100 pins / package
200009393	CRM ONH in titanium Certified reference material O, N and H in titanium, approximately 115 ppm oxygen, 60 ppm nitrogen, and 150 ppm hydrogen – 0.1 g/pin

Inorganic elemental analyzers

inductar® ONH cube

Sampling and Sample Containers

Article No.	Article Description
200009221	100 Nickel capsules for ONH analysis
100008324	Crucible holder; compl.
100002030	ELCUP, 500 graphite crucibles for ONH
200012416	Nickel baskets, 1.5 g 100 pc.
100002031	Sample holder, aluminum cup
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
100001954	Waste container for used single graphite crucible

Reaction Tubes & Accessories

Article No.	Article Description
100001465	Ceramic tube
100001466	Extraction tube with water cooling
100000465	Glass tube GL25; L = 140 mm
100001486	Glass tube GL 14; compl. moistening EC sensor
100000466	Glass tube GL 25; compl.; L = 200 mm
100000244	Oxidation tube
200014236	Plug oxidation/ reduction tube ID 14 mm

Spare Parts

Article No.	Article Description
100002741	Filter tube; GL 14; compl.
200005999	Quad-ring, black, 7.65 x 1.78 mm
100002026	Ronde D = 9 mm, stainless steel
200012948	Ronde, D = 9 mm, tin bronze
200006143	Shaft sealing

Wear Parts

Article No.	Article Description
100002076	Gasket, black
20001105	Hose pipe, silicon, transparent
100004291	inONHcu-wearparts set of o-rings and small wear parts inductar ONH cube
200011633	O-ring, black, 4 x 1 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200013842	O-ring, green, 6 x 3
200009016	O-ring, green, 10.5 x 2 mm
200007904	O-ring, green, 16 x 3 mm
200008068	O-ring, red, 32 x 3 mm
100002419	O-ring, white, 8.5 x 1.5 mm for sample holder

Inorganic elemental analyzers

inductar® ONH cube

Auxiliaries

Article No.	Article Description
100001941	Box wrench for manual inductar cube sample feeder
200013405	Clamp (glass tube)
200014382	Clamp, large
200014254	Clamp, small
200004594	Funnel, GL 14
100000594	Glass bottle and hose for change of coolant
200006785	Gloves, temperature resistant, 1 pair
200009954	Gripper for changing crucible adapter
200012930	Gripper tool for changing ceramic tube
100000470	Hose pipe, L = 10 m d(o) = 8 mm; d(i) = 6 mm
100005133	inPress Nickel capsule press inPRESS – Nickel capsule press inPRESS for closing ELCAPS ONH nickel capsules for analyses with the inductar ONH cube and inductar EL cube. Particle-tight closing of the nickel capsules is recommended for powder samples and magnetic samples.
100000492	Leak detection set, inductar
200005162	Leather gloves, 1 pair
200004358	LED pocket lamp
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200010268	Socket key, L: 10 mm
200007306	Spray bottle; 250 ml
200015017	Stuffing tool
200013203	Support rod, combustion tube, 110 mm
200014334	Telescope magnet
200006018	Tube rack to store cold/hot reaction tubes.
200006553	Tweezers for graphite crucible
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g
200005843	Weighing spatula

Optical emission spectrometers

Spark optical emission spectrometry (OES) is the most reliable and established analytical technique to determine the mass fraction or identification of metals and their alloys. Our OES analyzers meet the highest requirements of the metal industry, from production control to research and development, from the inspection of incoming or outgoing materials to scrap sorting.



ferro.lyte®

Precise metal testing. Anywhere. Anytime

Your benefits

- Maximized mobility: Measure anywhere due to the lightweight instrument with all-in-one concept
- Intuitive operation: Analyses easier than ever with the lyticOS® software
- Precise metal analysis: Results in laboratory quality due to the ONLYTE® technology
- Reliable results: Analyses and reports at the push of a button

Measurement Standards & Reference Materials

Article No.	Article Description
200008115	Re-Calibration sample, RA 10
200014631	Re-Calibration sample, RA 18
200004511	Re-Calibration sample, RA 19
200008470	Re-Calibration sample, RC 11
200013665	Re-Calibration sample, RC 12
200010146	Re-Calibration sample, RC 14
200009236	Re-Calibration sample, RC 32
200014632	Re-Calibration sample, RC 33
200011043	Re-Calibration sample, RC 36
200009470	Re-Calibration sample, RC 40
200014848	Re-Calibration sample, RE 12
200007785	Re-Calibration sample, RG 16
200012913	Re-Calibration sample, RH 18
200012650	Re-Calibration sample, RH 34
200006081	Re-Calibration sample, RN 19
200011162	Re-Calibration sample, RNi 10
200007463	Re-Calibration sample, RNi 11
200010084	Re-Calibration sample, RNi 11
200015096	Re-Calibration sample, RNi 12
200006864	Re-Calibration sample, RNi 14
200009681	Re-Calibration sample, RNi 15
200014242	Re-Calibration sample, RTi 11
200004570	Re-Calibration sample, RTi 13
200009691	Re-Calibration sample, RTi 14

Spare Parts

Article No.	Article Description
200004262	Fuse, 8 A 6.3 mm * 32

Optical emission spectrometers

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Wear Parts

Article No.	Article Description
100004377	Compression spring Da=3,76mm; d=0,53mm; Compression spring Da=3,76mm; d=0,53mm; Lo=2,4mm; 1.1200
200010667	Compression spring set Set of 5 compression springs for ferro.lyte
100005352	Fuse; car fuse; 7.5A
200008571	O-ring set, black Set of O-rings for ferro.lyte isolator
200006917	Protection window kit Kit window lightpath
200011288	Replacement battery Replacement battery for ferro.lyte complete with shipping case.
100004628	Velcro strap with buckle; black Velcro strap with buckle, 20 x 600 mm

Options

Article No.	Article Description
100004441	ferro-pw-c-CH Power cord CH
100004446	ferro-pw-c-CN-AU Power cord CN-AUS - plug type I, AS/NZS 3113
100004443	ferro-pw-c-EU Power cord EU - plug type F, CEE 7/7
100004445	ferro-pw-c-UK Power cord UK - plug type G, BS 1363
100004444	ferro-pw-c-US-CA-J Power cord US-CA-J - plug type B, NEMA 5
100005062	ferro-pw-s Power supply ferro.lyte - additional power/charger supply (one kit is scope of supply of ferro.lyte UV Probe 3) power supply 100-230V DC 33V 50/60Hz

Auxiliaries

Article No.	Article Description
100005566	Adapter BN, opening 5 mm for small parts Spark adapter BN, D5
200004613	Brass tube brush, RL brush for non-ferrous alloys, high purity alloys
200014820	Brass tube brush, SL brush for standard alloys
200009642	Cotton swabs Cotton swabs for lightpath window cleaning
100005598	ferro-adapt-C5 Wire adapter cap D5
200013436	ferro-adapt-set1 Centering adapter set - Set of 4 parts. Spark adapter BN, D5, must be ordered separately
100005693	ferro-adapt-sph Downholder for short parts
200005360	ferro-spre-EU Cable-free sample preparation, including grinding paper and grinding disk with hook and loop. Only distribution in Germany
200012266	ferro-spre-sp-125-60 Grinding disks D125mm, Al-oxid, grain 60 - for handgrinder with hook with Velcro fastening. OES Quality.

Optical emission spectrometers

ferro.lyte®

Auxiliaries

Article No.	Article Description
200011276	ferro-spre-sp-125-60Zr Grinding disks D125mm, Zirkon, grain 60 - for handgrinder with hook with Velcro fastening. OES Quality.
200007597	ferro-spre-sp-250-60 Grinding disks D250, Al-oxid, grain 60, for table grinder MLG 11. OES-Quality.
200007504	ferro-spre-sp-250-60Zr Grinding disks D250, Zirkon, grain 60, for table grinder MLG 11. OES-Quality.
200004520	ferro-spre-st125 Grinding disk with hook fastener 125mm M14 EU
100005889	Gap tool BN; gap 2mm; dia = 4,5 mm Tool for adjust eletrode for spark adapter BN
100003813	Gap tool gap 2 mm dia = 6 mm Tool for adjust eletrode
100005262	Pressure regulator; argon; EN-962
100005344	Pressure regulator; argon; US-CGA580 Pressure regulator; argon; CGA580 (USA)
100005595	Tube adapter; max. d=20mm Centering tool D20
100005596	Tube adapter; max. d=50mm Centering tool D50
100005597	Tube and wire adapter; max. d=5mm Centering tool D5
100004324	Window tool lightpath Tool window lightpath

Mass spectrometers

Our new **xION** isotope ratio mass spectrometer platform is the smallest 5 kV instrument available on the market thanks to the uniquely designed ion optics and integrated **centrION** CF gas handling system. Combined with **lyticOS**® Software Suite the **xION** platform combines exceptional analytical performance with powerful automation and intelligence.



isoprime precisION

The most flexible isotope ratio mass spectrometer ever created

The isoprime precisION isotope ratio mass spectrometer is characterized by highest analytical performance and unsurpassed flexibility. It offers the perfect starting point for your research and grows with your research requirements.

Your benefits

- High performance IRMS system with excellent sensitivity, accuracy and precision
- Simultaneous measurement of up to 10 ion beams for multi-collector experiments
- **lyticOS**® Software Suite for intelligent automation and control
- Dual Inlet configuration optional

Chemicals & Reagents

Article No.	Article Description
200001731	Consumables kit for isoprime visION & precisION stable isotope analyzer Contains all expected consumables for 1 years continuous, normal use of the isoprime visION & precisION stable isotope analyzer. Includes ferrules, silica, ion source parts, rotary oil, activated alumina, defining slits, fuses, gaskets and seals.

Seals & Connectors

Article No.	Article Description
200001198	Ferrule, 2 hole, graphite vespel, 1/16" x 0.003"
200002886	Ferrule, 2 hole, graphite vespel, 1/16" x 0.004", 0.003"
200000914	Ferrule, graphite vespel, 1/16" x 0.003" / 0.004"
200001180	Ferrule, graphite vespel, 1/16" x 0.003"
200001950	Ferrule, reducing, PTFE, 1/8" x 1/16"
200011889	Ferrule, stainless steel, 1/16"
200006816	Quad ring, viton, collector flange For the xION instrument series
200015494	Quad ring, viton, source flange For the xION instrument series
200013731	Sealing ring, vespel, 1/16" x 1/16"

Gas / Liquid Flow Handling

Article No.	Article Description
200000592	Capillary, fused silica, 100 um x 363 um, 1 m
200002397	Capillary, fused silica, 75 um x 190 um, 1 m
200003898	Capillary, stainless steel, 1/8" x 0.016"
200014697	Tube, peek, orange, 1/16" x 0.020"

Mass spectrometers isoprime precisION

Ion Optics

Article No.	Article Description
200006368	Complete Ion Source For the xION instrument series Does not include the internal feedthrough connections. Please consult with your service representative before purchase
200015965	Ion Source Consumables Kit Kit of consumable parts required for ion source maintenance in the isoprime visION and isoprime precisION instruments
200002069	Internal Source Wire Spares Kit xION
200003489	Source and Flange Assembly
200001848	Alpha plate For the IsoPrime, IsoPrime100 and xION instrument series
200013507	Ceramic spacer for ion repeller For the xION instrument series
200006368	Circlip circlip-truarc
200006299	Compression Spring
200012162	Defining slit For the xION instrument series
200011260	Electron entry plate For the xION instrument series
200001774	End Plate (Source)
200004488	Filament support block For the xION instrument series
200000568	Half Plate
200000278	Ion Block Rear Centre
200000382	Ion exit slit plate, 5 mm
200010791	Ion repeller with gas inlet For the xION instrument series

Article No.	Article Description
200003243	Ion source magnet For the IsoPrime, IsoPrime100 and xION instrument series
200004031	Ionisation Filament Compatible with IsoPrime, IsoPrime100 and xION instrument series
200005981	Locking plate For the xION instrument series
200002697	Lower Z plate
200003350	Rod, ceramic, 2.75 mm x 45 mm
200003698	Screw, stainless steel, CHD, SLT, M1.6 x 8 mm
200001779	Screw, stainless steel, CHD, SLT, M2 x 8 mm (10 pc./package)
200002676	Screw, stainless steel, grub, SKT, M3 x 4 mm
200000886	Screw, stainless steel, M1.6 x 3 mm screw (10 pc./package)
200001939	Sleeve, ceramic, 3.5 mm
200000546	Spacer, ceramic, 2.0 mm
200000782	Spacer, ceramic, 6.0 mm
200001979	Spacer, ceramic, 6.2 x 3.68 x 1.78 mm
200002646	Terminal washer
200014411	Trap For the xION instrument series
200002658	Trap Support
200001970	Upper Z plate
200003420	Washer, flat, M1.6
200000147	Washer, flat, M2
200002836	xION defining slit & magnet support assembly

Vacuum System

Article No.	Article Description
200001448	Foreline trap assembly
200012329	Foreline trap molecular sieve, 10A
200010982	Gasket, VCR, 1/4" gasket VCR 1/7 inch
200001391	Knurled Vent Screw B73600112
200010501	MKS 971B High Vacuum Gauge anode kit
100008430	MKS 972B High Vacuum Gauge anode kit
200001005	nEXT 240 Turbopump bearing and cartridge service kit. Recommended to be changed every four years.

Article No.	Article Description
100008596	nEXT 240 oil cartridge service kit. Recommended to be changed every two years.
200003949	Oil mist filter for rotary pump exhaust
200007970	Rotary pump oil, Ultra Grade 19
200000341	Vacuum clamp ring, NW25
200000247	Vacuum hose clip
200001042	Vacuum hose, PVC, 25 mm
200002823	VCR Split Nut VCR Split Nut

Auxiliaries

Article No.	Article Description
200002667	Fused silica capillary cutting tile

Mass spectrometers

Our new **xION** isotope ratio mass spectrometer platform is the smallest 5 kV instrument available on the market thanks to the uniquely designed ion optics and integrated **centriION** CF gas handling system. Combined with **lyticOS**® Software Suite the **xION** platform combines exceptional analytical performance with powerful automation and intelligence.



isoprime visION® Solutions

The most elegantly simple stable isotope analyzer

Simplicity is what isoprime visION® is about. isoprime visION® is an isotope ratio mass spectrometer which offers a completely new experience of stable isotope analysis. An experience where you are free from the routine chores of maintenance allowing you to focus on the science, not the instrumentation.

Your benefits

- Comprehensive, tailor-made solutions for routine stable isotope analysis
- Smallest IRMS footprint on the market
- Fully automated system setup and performance checks
- **lyticOS**® Software Suite for intelligent automation and control

Chemicals & Reagents

Article No.	Article Description
200001731	Consumables kit for isoprime visION & preciSION stable isotope analyzer Contains all expected consumables for 1 years continuous, normal use of the isoprime visION & preciSION stable isotope analyzer. Includes ferrules, silica, ion source parts, rotary oil, activated alumina, defining slits, fuses, gaskets and seals.

Seals & Connectors

Article No.	Article Description
200001198	Ferrule, 2 hole, graphite vespel, 1/16" x 0.003"
200002886	Ferrule, 2 hole, graphite vespel, 1/16" x 0.004", 0.003"
200000914	Ferrule, graphite vespel, 1/16" x 0.003" / 0.004"
200001180	Ferrule, graphite vespel, 1/16" x 0.003"
200001950	Ferrule, reducing, PTFE, 1/8" x 1/16"
200011889	Ferrule, stainless steel, 1/16"
200006816	Quad ring, viton, collector flange For the xION instrument series
200015494	Quad ring, viton, source flange For the xION instrument series
200013731	Sealing ring, vespel, 1/16" x 1/16"

Gas / Liquid Flow Handling

Article No.	Article Description
200000592	Capillary, fused silica, 100 um x 363 um, 1 m
200002397	Capillary, fused silica, 75 um x 190 um, 1 m
200003898	Capillary, stainless steel, 1/8" x 0.016"
200014697	Tube, peek, orange, 1/16" x 0.020"

Mass spectrometers

isoprime visION

Ion Optics

Article No.	Article Description
200006368	Complete Ion Source For the xION instrument series Does not include the internal feedthrough connections. Please consult with your service representative before purchase
200015965	Ion Source Consumables Kit Kit of consumable parts required for ion source maintenance in the isoprime visION and isoprime precisION instruments
200002069	Internal Source Wire Spares Kit xION
200003489	Source and Flange Assembly
200001848	Alpha plate For the IsoPrime, IsoPrime100 and xION instrument series
200013507	Ceramic spacer for ion repeller For the xION instrument series
200006368	Circlip circlip-truarc
200006299	Compression Spring
200012162	Defining slit For the xION instrument series
200011260	Electron entry plate For the xION instrument series
200001774	End Plate (Source)
200004488	Filament support block For the xION instrument series
200000568	Half Plate
200000278	Ion Block Rear Centre
200000382	Ion exit slit plate, 5 mm
200010791	Ion repeller with gas inlet For the xION instrument series

Article No.	Article Description
200003243	Ion source magnet For the IsoPrime, IsoPrime100 and xION instrument series
200004031	Ionisation Filament Compatible with IsoPrime, IsoPrime100 and xION instrument series
200005981	Locking plate For the xION instrument series
200002697	Lower Z plate
200003350	Rod, ceramic, 2.75 mm x 45 mm
200003698	Screw, stainless steel, CHD, SLT, M1.6 x 8 mm
200001779	Screw, stainless steel, CHD, SLT, M2 x 8 mm (10 pc./package)
200002676	Screw, stainless steel, grub, SKT, M3 x 4 mm
200000886	Screw, stainless steel, M1.6 x 3 mm screw (10 pc./package)
200001939	Sleeve, ceramic, 3.5 mm
200000546	Spacer, ceramic, 2.0 mm
200000782	Spacer, ceramic, 6.0 mm
200001979	Spacer, ceramic, 6.2 x 3.68 x 1.78 mm
200002646	Terminal washer
200014411	Trap For the xION instrument series
200002658	Trap Support
200001970	Upper Z plate
200003420	Washer, flat, M1.6
200000147	Washer, flat, M2
200002836	xION defining slit & magnet support assembly

Vacuum System

Article No.	Article Description
200001448	Foreline trap assembly
200012329	Foreline trap molecular sieve, 10A
200010982	Gasket, VCR, 1/4" gasket VCR 1/7 inch
200001391	Knurled Vent Screw B73600112
200010501	MKS 971B High Vacuum Gauge anode kit
100008430	MKS 972B High Vacuum Gauge anode kit
200001005	nEXT 240 Turbopump bearing and cartridge service kit. Recommended to be changed every four years.

Article No.	Article Description
100008596	nEXT 240 oil cartridge service kit. Recommended to be changed every two years.
200003949	Oil mist filter for rotary pump exhaust
200007970	Rotary pump oil, Ultra Grade 19
200000341	Vacuum clamp ring, NW25
200000247	Vacuum hose clip
200001042	Vacuum hose, PVC, 25 mm
200002823	VCR Split Nut VCR Split Nut

Auxiliaries

Article No.	Article Description
200002667	Fused silica capillary cutting tile

EA-IRMS inlets



iso TOC[®] cube

Fully integrated TOC / TN_x isotope ratio analysis

Your benefits

- Only truly integrated TOC-IRMS system for analysis of dissolved organics
- Exceptional dissolved organic carbon and bound nitrogen isotope analysis
- High temperature combustion of recalcitrant compounds yields 100 % C and N recovery
- Eliminates the need for sample extraction and purification

Chemicals & Reagents

Article No.	Article Description
200014271	Copper for elemental analysis, wires, 100 g
200004784	Grease paste, 2 g, for syringe spindle drive
200006308	Pt-catalyst, 1 % Pt, 15 ml, TOC-systems
200007521	Quartz chips, 50 g
200004827	Quartz wool for elemental analysis, 10 g
200005872	Silver wool for elemental analysis, 50 g
200004074	Set of consumables for approx. 3000 samples includes all necessary consumables (chemicals, sample containers, reaction tubes) for approx. 3000 analyses (depending on sample weight and matrix).

Measurement Standards & Reference Materials

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA) and other external providers. Supply of these materials is dependent on the material being in stock at the provider. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

For measurement on the iso TOC[®] cube the following reference materials need to first be dissolved in laboratory grade pure water to a desired concentration of greater than 5 mg/l carbon or 25 mg/l nitrogen.

Article No.	Article Description
200003804	IRMS RM, IAEA 600, Caffeine, d13C, d15N
200000423	IRMS RM, USGS40, L-Glutamic acid, d13C, d15N
200000105	IRMS RM, USGS41A, L-Glutamic acid, d13C, d15N
200001733	IRMS RM, IAEA CH-6, Sucrose, d13C

Sampling & Sample Containers

Article No.	Article Description
200011783	Cap with septum 1.6 mm, for 40 ml sample vial, 100 pc./package
200004738	Sample vials 40 ml, 100 pc./package
200008484	Cover foil, 1500 pc./package
200007795	Erlenmeyer flask, 250 ml

EA-IRMS inlets

iso TOC® cube

Reaction Tubes & Accessories

Article No.	Article Description
200014796	Ash crucible, quartz, slotted
200005183	Cannula, 0.5 mm
200007844	Combustion / reduction tube
200013470	Filter tube
200011827	Filter tube, with connector
200009425	Glass cooler
200006378	Acid reservoir GL 32, L = 300 mm
200008714	Glass tube, L = 300 mm
200014026	Protective tube, 105 mm, slotted
200004147	Quartz bridge, 65 mm from S/N 1193 1126

Wear Parts

Article No.	Article Description
200014191	O-ring, black, 7.59 x 2.62 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200012426	O-ring, green, 5 x 2 mm
200009016	O-ring, green, 10.5 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200005999	Quad ring, black, 7.65 x 1.78 mm
200011955	Set of O-rings / small wear parts for vario TOC and iso TOC instruments.

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers and crucibles
200010252	Funnel D = 65 mm
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200006791	Leak finding set vario TOC cube / vario TOC select / iso TOC cube
200005162	Leather gloves, 1 pair
200010100	Micro spatula
200013850	Sample plate for 24 samples with cover
200008983	Tamper for filling of quartz- or aluminium oxide wool
200006018	Tube retainer to store cold / hot tubes (combustion / reduction)
200010676	Tweezers, L = 145 mm

EA-IRMS inlets

Our EA-IRMS solutions are the most technically advanced available and offer innovative technologies for best analysis results. With our unique Advanced Purge and Trap (APT) technology for separating and focussing gas mixtures as well as the zero-blank ball valve sample introduction system, analyses are straightforward, no matter how complex the samples.



vario ISOTOPE cube

The gold standard in elemental analyzer isotope ratio analysis

Your benefits

- Industry-leading accuracy and precision for $\delta^{15}\text{N}$, $\delta^{13}\text{C}$ and $\delta^{34}\text{S}$ thanks to APT technology
- Capable of analyzing materials with a C:N and C:S ratio of > 8,000:1
- Excellent analysis of large sample sizes up to 30 mg (abs) carbon
- Reliable results, even for low-microgram samples
- Patented ball valve for blank-free sample transfer

Consumables Sets

Article No.	Article Description
200001997	VISOcu-4k-CN Includes all necessary consumables (chemicals, sample containers, reaction tubes) for approx. 4000 CN analyses (depending on sample weight and matrix).
200003447	vISOcu-4k-CN-LS includes all necessary consumables (chemicals, sample containers, reaction tubes) for approx. 4000 CN analyses (depending on sample weight and matrix).
200002586	VISOcu-4k-CNS Includes all necessary consumables (chemicals, sample containers, reaction tubes) for approx. 4000 CNS analyses (depending on sample weight and matrix).
200002267	VISOcu-4k-0 Includes all necessary consumables (chemicals, sample containers, reaction tubes) for approx. 4000 0 analyses (depending on sample weight and matrix).
200000168	VISOcu-4k-0-LS includes all necessary consumables (chemicals, sample containers, reaction tubes) for approx. 4000 0 analyses (depending on sample weight and matrix).
200000530	vMULcu-4k-0 Set of consumables for option 0 - contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of solid samples.
200003045	vMULcu-1k-0 Set of consumables for option 0 - contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 1000 analyses of solid samples.
200002709	vISOcu-1k-HD-LS Set of consumables for HD Chrom analyses - contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 1000 analyses of liquid samples.

Chemicals & Reagents

Article No.	Article Description	Article No.	Article Description
200004773	Aluminium oxide wool, 20 g	100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g
200005447	Carbon black, 65 g, ash-free	200009133	Graphite felt, D = 26 mm, 12 pc.
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis	20001666	Polyethylene, 10 g
200014271	Copper, 100 g	200008269	Quartz chips, 1 - 2 mm, 100 g
200010245	Corundum balls, 50 g	200004827	Quartz wool, 10 g
200013169	Cotton wool, 50 g	200005872	Silver wool, 50 g
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 x 30 g bottles per pack, granular, free-flowing, 30 g	200008986	W03-granulate, for filling comb. tube
		200009890	W03-powder, sample additive, 25 g
		200012531	W03-powder, sample additive, 90 g

EA-IRMS inlets vario ISOTOPE cube

Measurement Standards & Reference Materials

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA) and other external providers. Supply of these materials is dependent on the material being in stock at the provider. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

The following standards are suitable for elemental abundance measurements for the vario ISOTOPE cube **in standalone mode** not coupled with an Elementar IRMS.

Article No.	Article Description
200007435	Acetanilide, 5 g (powder) test standard for CHNO elemental abundance analysis.
200011700	Benzoic acid, 5 g test standard for CHO elemental elemental abundance analysis.
200005129	Sulfanilamide, 10 g test standard for CHNOS elemental abundance analysis.
200014950	Sulfanilic acid, 5 g test standard for CHNOS elemental abundance analysis.

The following standards are suitable for isotopic calibrations for the vario ISOTOPE cube **coupled with an Elementar IRMS**.

Article No.	Article Description
200000423	USGS 40, L-Glutamic acid, d13C, d15N
200000105	USGS 41a, L-Glutamic acid, d13C, d15N
200003804	IAEA 600, Caffeine, d13C, d15N
200001348	IAEA-CH-3, Cellulose, d13C
200001177	IAEA-N1, Ammonium Sulfate, d15N
200003424	IAEA-N2, Ammonium Sulfate, d15N
200001036	USGS 25, Ammonium Sulfate, d15N
200001968	USGS 26, Ammonum Sulfate, d15N
200001596	IAEA 305, Ammonium Sulfate, d15N
200002542	IAEA 311, Ammonium Sulfate, d15N highly enriched
200002315	IAEA S-3, Elemental Sulfur, d34S
200003946	IAEA S-4, Elemental Sulfur, d34S
200003273	IAEA S05, Barium Sulfate, d34S
200002964	IAEA S06, Barium Sulfate, d34S
200002889	NBS127, Barium Sulfate, d34S, d18O
200002484	USGS32, Potassium Sulfate, d15N, d18O
200003356	IAEA S1, Silver Sulfide, d34S
200003087	IAEA S2, Silver Sulfide, d34S
200000857	USGS 24, Graphite, d13C
200002384	NBS22 Oil, d13C, d2H
200000956	IAEA CH-7, Polyethylene, d2H, d13C
200002058	USGS35, sodium nitrate, d15N, d18O
200003183	IAEA-310, Urea, d15N
200002875	IAEA NO-3, Potassium nitrate, d15N, d18O

EA-IRMS inlets vario ISOTOPE cube

Sampling & Sample Containers

Article No.	Article Description
200012803	Aluminum capsules, V = 0.07 ml, 250 pc.
200013554	Aluminum boats, 4 x 4 x 11 mm, 1000 pc.
200009311	Aluminum boats, 6 x 6 x 12 mm, 500 pc.
200005417	Aluminum capsules, V = 0.03 ml, 250 pc.
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200011391	Silver capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples.
200014886	Silver capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200009772	Silver capsules, 8 x 5 mm V = 0.12 ml, 250 pc., only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200006523	Tin capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200006458	Tin capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples
200009914	Tin capsules, 3.75 x 3.5 mm, 100 pc. V = 0.03 ml, only for solid samples.
200009172	Tin capsules, 8 x 5 mm, 250 pc. V = 0.12 ml, only for solid samples.
200008184	Tin capsules, V = 0,1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc. Tin foil for elemental analysis – 35 x 35 mm, 450 pc./package
200011221	Tin foil, 50 x 50 mm, 450 pc. Tin foil for elemental analysis – 50 x 50 mm, 450 pc./package
200012150	VLS vials-1.5ml Sample vials 1.5 ml, screw – cap with septum, 100 pc./package

EA-IRMS inlets

vario ISOTOPE cube

Reaction Tubes & Accessories

Article No.	Article Description
200009138	Ash crucible, ceramic, slotted
200014555	Ash finger, 60 mm, slotted
100005768	Combustion tube with filling instr. CHNS/CHN Labeled quartz combustion tube suitable for UNICUBE / vario MICRO cube / vario EL cube / vario ISOTOPE select / vario ISOTOPE cube
200007844	Combustion / reduction tube (quartz)
200013540	Drying tube, 100 mm glass tube only!
200014764	O ₂ lance, 140 mm
200004159	O ₂ lance, 150 mm
200012140	O ₂ lance, 170 mm
200014026	Protective tube, 105 mm, slotted
200004147	Quartz glass bridge, 65 mm
100005770	Reduction Tube with filling instr. CHNS/CHN Labeled quartz reduction tube, suitable for UNICUBE / vario MICRO cube / vario EL cube / vario ISOTOPE select / vario ISOTOPE cube .
200011820	Support tube, 65 mm

Spare Parts

Article No.	Article Description
200011438	Ball for ball valve, 14 mm blind hole
200011633	O-ring, black, 4 x 1 mm
200014191	O-ring, black, 7.59 x 2.62 mm
200015397	O-ring, green, 4 x 4 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200013028	O-ring, green, 18 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200010515	Oxygen lance sealing, 10 pc.
200005999	Quad-ring, black, 7.65 x 1.78 mm
200010811	Set of half shells 14 mm

Wear Parts

Article No.	Article Description
200000555	Maintenance kit for vario EL cube/vario ISOTOPE cube - contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200007731	Set of O rings and small wear parts for vario EL cube / vario ISOTOPE cube

EA-IRMS inlets

vario ISOTOPE cube

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200010902	Face spanner for adjustment of the ball
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200009077	Leakage set for vario EL cube, vario MACRO cube, vario PYRO cube®, rapid OXY cube® and vario ISOTOPE cube.
200005162	Leather gloves, 1 pair
200009549	manpress-10.5mm-60pos Manual pressing tool, D = 10.5 mm for manual compressing of samples for 60 position sample carousel. Suitable for foils up to 50 x 50 mm.
200010997	manpress-7mm-120pos Manual pressing tool, D = 7 mm - for manual compressing of samples for 120 position sample carousel. Suitable for boats up to 8 x 8 x 16 mm and foils up to 35 x 35 mm.
200004971	manpress-9mm-80pos Manual pressing tool, D = 9 mm - for manual compressing of samples for 80 position sample carousel. Suitable for foils up to 35 x 35 mm.
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes.
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g



vario ISOTOPE select

The workhorse in elemental analyzer isotope ratio analysis

Your benefits

- Entry-level elemental analyzer for $\delta^{15}\text{N}$, $\delta^{13}\text{C}$ and $\delta^{34}\text{S}$ analysis of organic material
- Reliable results for sample sizes up to 7 mg (abs) carbon
- Patented ball valve for blank-free sample transfer
- Tool-free routine maintenance
- Integrated autosampler with up to 240 positions

Consumables Sets

Article No.	Article Description
200002448	VISOSEL-4K-CN Includes all necessary consumables (chemicals, sample containers, reaction tubes) for approx. 4000 CN analyses (depending on sample weight and matrix).
200006117	vISOsel-4k-CN-LS Set of consumables for vario ISOTOPE select with VLS - contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of liquid samples in CN mode.
200003939	VISOSEL-4K-CNS Includes all necessary consumables (chemicals, sample containers, reaction tubes) for approx. 4000 CNS analyses (depending on sample weight and matrix).

Chemicals & Reagents

Article No.	Article Description
200004773	Aluminium oxide wool, 20 g
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200014271	Copper, 100 g
200010245	Corundum balls, 50 g
200013169	Cotton wool, 50 g
100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g
200008269	Quartz chips, 1 - 2 mm, 100 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g
200008986	W03-granulate, for filling comb. tube
200009890	W03-powder, sample additive, 25 g
200012531	W03-powder, sample additive, 90 g

EA-IRMS inlets vario ISOTOPE select

Measurement Standards & Reference Materials

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA) and other external providers. Supply of these materials is dependent on the material being in stock at the provider. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

The following standards are suitable for elemental abundance measurements for the vario ISOTOPE select **in standalone mode** not coupled with an Elementar IRMS.

Article No.	Article Description
200007435	Acetanilide, 5 g (powder) test standard for CHNO elemental abundance analysis.
200011700	Benzoic acid, 5 g test standard for CHO elemental elemental abundance analysis.
200005129	Sulfanilamide, 10 g test standard for CHNOS elemental abundance analysis.
200014950	Sulfanilic acid, 5 g test standard for CHNOS elemental abundance analysis.

The following standards are suitable for isotopic calibrations for the vario ISOTOPE select **coupled with an Elementar IRMS**.

Article No.	Article Description
200000423	USGS 40, L-Glutamic acid, d13C, d15N
200000105	USGS 41a, L-Glutamic acid, d13C, d15N
200003804	IAEA 600, Caffeine, d13C, d15N
200001348	IAEA-CH-3, Cellulose, d13C
200001177	IAEA-N1, Ammonium Sulfate, d15N
200003424	IAEA-N2, Ammonium Sulfate, d15N
200001036	USGS 25, Ammonium Sulfate, d15N
200001968	USGS 26, Ammonum Sulfate, d15N
200001596	IAEA 305, Ammonium Sulfate, d15N
200002542	IAEA 311, Ammonium Sulfate, d15N highly enriched
200002315	IAEA S-3, Elemental Sulfur, d34S
200003946	IAEA S-4, Elemental Sulfur, d34S
200003273	IAEA S05, Barium Sulfate, d34S
200002964	IAEA S06, Barium Sulfate, d34S
200002889	NBS127, Barium Sulfate, d34S, d18O
200002484	USGS32, Potassium Sulfate, d15N, d18O
200003356	IAEA S1, Silver Sulfide, d34S
200003087	IAEA S2, Silver Sulfide, d34S
200000857	USGS 24, Graphite, d13C
200002384	NBS22 Oil, d13C, d2H
200000956	IAEA CH-7, Polyethylene, d2H, d13C
200002058	USGS35, sodium nitrate, d15N, d18O
200003183	IAEA-310, Urea, d15N
200002875	IAEA NO-3, Potassium nitrate, d15N, d18O

EA-IRMS inlets vario ISOTOPE select

Sampling & Sample Containers

Article No.	Article Description
200012803	Aluminum capsules, V = 0.07 ml, 250 pc.
200013554	Aluminum boats, 4 x 4 x 11 mm, 1000 pc.
200009311	Aluminum boats, 6 x 6 x 12 mm, 500 pc.
200005417	Aluminum capsules, V = 0.03 ml, 250 pc.
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200011391	Silver capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples.
200014886	Silver capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200009772	Silver capsules, 8 x 5 mm V = 0.12 ml, 250 pc., only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200006523	Tin capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200006458	Tin capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples
200009914	Tin capsules, 3.75 x 3.5 mm, 100 pc. V = 0.03 ml, only for solid samples.
200009172	Tin capsules, 8 x 5 mm, 250 pc. V = 0.12 ml, only for solid samples.
200008184	Tin capsules, V = 0,1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
100007830	Tin capsules for AMS, V = 0.1 ml, 250 pc., Tin capsules for special applications (e.g. radiocarbon analyses)
100007831	Tin capsules for AMS, V = 0.05 ml, 250 pc., Tin capsules for special applications (e.g. radiocarbon analyses)
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc. Tin foil for elemental analysis – 35 x 35 mm, 450 pc./package
200011221	Tin foil, 50 x 50 mm, 450 pc. Tin foil for elemental analysis – 50 x 50 mm, 450 pc./package

EA-IRMS inlets

vario ISOTOPE select

Sampling & Sample Containers

Article No.	Article Description
200012150	VLS vials-1.5ml Sample vials 1.5 ml, screw - cap with septum, 100 pc./package

Reaction Tubes & Accessories

Article No.	Article Description
200009138	Ash crucible, ceramic, slotted
200014555	Ash finger, 60 mm, slotted
100005768	Combustion tube with filling instr. CHNS/CHN Labeled quartz combustion tube suitable for UNICUBE / vario MICRO cube / vario EL cube / vario ISOTOPE select / vario ISOTOPE cube
200007844	Combustion / reduction tube (quartz)
200013540	Drying tube, 100 mm glass tube only!
200013456	Drying tube, 300 mm glass tube only!
200014764	O ₂ lance, 140 mm
200004159	O ₂ lance, 150 mm
200012140	O ₂ lance, 170 mm
200014026	Protective tube, 105 mm, slotted
100002380	Quartz glass bridge for UNICUBE Quartz glass bridge for UNICUBE (all S/N) and vario ISOTOPE select from S/N 0410.180001
200004147	Quartz glass bridge, 65 mm
100005770	Reduction Tube with filling instr. CHNS/CHN Labeled quartz reduction tube, suitable for UNICUBE / vario MICRO cube / vario EL cube / vario ISOTOPE select / vario ISOTOPE cube .
200011820	Support tube, 65 mm

Spare Parts

Article No.	Article Description
200015178	Ball for ball valve, 10 mm blind hole
200011633	O-ring, black, 4 x 1 mm
200014191	O-ring, black, 7.59 x 2.62 mm
200015397	O-ring, green, 4 x 4 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200009565	O-ring, green, 8 x 2 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200013028	O-ring, green, 18 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200010515	Oxygen lance sealing, 10 pc.
200005999	Quad-ring, black, 7.65 x 1.78 mm
200011004	Set of half shells 10 mm Set of half shells for UNICUBE®, vario MICRO cube, rapid OXY cube®, vario PYRO cube®, vario ISOTOPE select, vario TOC cube and vario TOC select.

EA-IRMS inlets

vario ISOTOPE select

Wear Parts

Article No.	Article Description
200000740	Maintenance kit for UNICUBE / vario ISOTOPE select – contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200007336	Maintenance kit for vario MICRO cube / vario ISOTOPE select – contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200005939	Set of O rings and small wear parts for vario MICRO cube / vario ISOTOPE select
100003908	Set of O-rings /small wear parts, UNICUBE / vario ISOTOPE select

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200010902	Face spanner for adjustment of the ball
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200005162	Leather gloves, 1 pair
200009549	manpress-10.5mm-60pos Manual pressing tool, D = 10.5 mm for manual compressing of samples for 60 position sample carousel. Suitable for foils up to 50 x 50 mm.
200010997	manpress-7mm-120pos Manual pressing tool, D = 7 mm – for manual compressing of samples for 120 position sample carousel. Suitable for boats up to 8 x 8 x 16 mm and foils up to 35 x 35 mm.
200004971	manpress-9mm-80pos Manual pressing tool, D = 9 mm – for manual compressing of samples for 80 position sample carousel. Suitable for foils up to 35 x 35 mm.
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes.
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g



vario PYRO cube®

CNSOH isotope ratio analysis – all in one universal instrument

Your benefits

- OH and CNS isotope ratio analysis all in one universal instrument
- Capable of analyzing materials with a C:N and C:S ratio of > 8,000:1
- The only system for blank-free $\delta^{18}\text{O}$ analyses
- Matrix-independent, reliable results thanks to patented backflush technology, with exceptional separation of N_2 and CO

Consumables Sets

Article No.	Article Description
200003428	vPYRcu-4k-CN Includes all necessary chemicals, sample containers and small parts for approx. 4000 analyses (depending on sample weight and matrix).
200002001	vPYRcu-4k-CN-LS Set of consumables for vario PYRO cube with vario Liquid Sampler – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of liquid samples
200003841	vPYRcu-4k-CNS Includes all necessary chemicals, sample containers and small parts for approx. 4000 analyses (depending on sample weight and matrix).
200003572	vPYRcu-4k-OH Includes all necessary chemicals, sample containers and small parts for approx. 4000 analyses (depending on sample weight and matrix).
200000543	vPYRcu-4k-OH-LS includes all necessary chemicals, sample containers and small parts for approx. 4000 analyses with liquid autosampler (depending on sample weight and matrix).

Chemicals & Reagents

Article No.	Article Description
200004773	Aluminium oxide wool, 20 g
200005511	Carbon black conditioned, 10 ml
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200014271	Copper, 100 g
200010245	Corundum balls, 50 g
200013169	Cotton wool, 50 g
100007541	EAS CARBSORBER Ready for use CO_2 -absorber, 2 x 30 g bottles per pack, granular, free-flowing, 30 g
100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g
200006135	Glassy carbon chips, 80 g
200014652	Graphite felt, D = 15 mm, 12 pc.
200008269	Quartz chips, 1 - 2 mm, 100 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g
200008986	WO_3 -granulate, for filling comb. tube
200009890	WO_3 -powder, sample additive, 25 g
200012531	WO_3 -powder, sample additive, 90 g

EA-IRMS inlets vario PYRO cube®

Measurement Standards & Reference Materials

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA) and other external providers. Supply of these materials is dependent on the material being in stock at the provider. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

The following standards are suitable for elemental abundance measurements for the vario PYRO cube® **in standalone mode** not coupled with an Elementar IRMS.

Article No.	Article Description
200007435	Acetanilide, 5 g (powder) test standard for CHNO elemental abundance analysis.
200011700	Benzoic acid, 5 g test standard for CHO elemental elemental abundance analysis.
200005129	Sulfanilamide, 10 g test standard for CHNOS elemental abundance analysis.
200014950	Sulfanilic acid, 5 g test standard for CHNOS elemental abundance analysis.

The following standards are suitable for isotopic calibrations for the vario PYRO cube® **coupled with an Elementar IRMS.**

Article No.	Article Description
200001139	IAEA 601, Benzoic acid, d180
200001606	IAEA 602, Benzoic acid, d180
100007696	USGS 42, Tibetan Human Hair, d2H, d180
200000956	IAEA CH-7, Polyethylene, d2H, d13C
200000423	USGS 40, L-Glutamic acid, d13C, d15N
200000105	USGS 41a, L-Glutamic acid, d13C, d15N
200003804	IAEA 600, Caffeine, d13C, d15N
200001348	IAEA-CH-3, Cellulose, d13C
200001177	IAEA-N1, Ammonium Sulfate, d15N
200003424	IAEA-N2, Ammonium Sulfate, d15N
200001036	USGS 25, Ammonium Sulfate, d15N
200001968	USGS 26, Ammonum Sulfate, d15N
200001596	IAEA 305, Ammonium Sulfate, d15N
200002542	IAEA 311, Ammonium Sulfate, d15N highly enriched
200002315	IAEA S-3, Elemental Sulfur, d34S
200003946	IAEA S-4, Elemental Sulfur, d34S
200003273	IAEA S05, Barium Sulfate, d34S
200002964	IAEA S06, Barium Sulfate, d34S
200002889	NBS127, Barium Sulfate, d34S, d180
200002484	USGS32, Potassium Sulfate, d15N, d180
200003356	IAEA S1, Silver Sulfide, d34S
200003087	IAEA S2, Silver Sulfide, d34S
200000857	USGS 24, Graphite, d13C
200002384	NBS22 Oil, d13C, d2H
200002058	USGS35, sodium nitrate, d15N, d180
200003183	IAEA-310, Urea, d15N
200002875	IAEA NO-3, Potassium nitrate, d15N, d180

EA-IRMS inlets vario PYRO cube®

Sampling & Sample Containers

Article No.	Article Description
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200011391	Silver capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples.
200014886	Silver capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200009772	Silver capsules, 8 x 5 mm V = 0.12 ml, 250 pc., only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200006523	Tin capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200006458	Tin capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples
200009914	Tin capsules, 3.75 x 3.5 mm, 100 pc. V = 0.03 ml, only for solid samples.
200009172	Tin capsules, 8 x 5 mm, 250 pc. V = 0.12 ml, only for solid samples.
200008184	Tin capsules, V = 0,1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc. Tin foil for elemental analysis – 35 x 35 mm, 450 pc./package
200011221	Tin foil, 50 x 50 mm, 450 pc. Tin foil for elemental analysis – 50 x 50 mm, 450 pc./package
200012150	VLS vials-1.5ml Sample vials 1.5 ml, screw – cap with septum, 100 pc./package

EA-IRMS inlets vario PYRO cube®

Reaction Tubes & Accessories

Article No.	Article Description
200006728	Ash crucible HT for pyrolysis, D = 12 mm
200009138	Ash crucible, ceramic, slotted
200014555	Ash finger, 60 mm, slotted
200015900	ash finger, high temperature
200006969	Combustion tube, vario PYRO cube
200013540	Drying tube, 100 mm glass tube only!
200009409	Drying tube, L = 300 mm, compl.
200012663	drying tube, L-shaped drying tube 370mm
200015088	Glassy carbon tube When replacing the glassy carbon tube, always replace the ceramic protection tube (200007373) as well.
200005887	O ₂ lance, 90 mm
200007373	Protective ceramic tube
200015370	Reduction tube, vario PYRO cube
200015226	rOXYcu-PYRO TUBE. Set glassy carbon tube and protective outer ceramic tube – for rapid OXY cube and vario PYRO cube.
200013388	Support rod, L=175 mm, vario PYRO cube
200005308	Support rod, reduction tube, L=65 mm
200004849	Support tube, D = 12 mm, L = 60 mm

Spare Parts

Article No.	Article Description
200011633	O-ring, black, 4 x 1 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200015397	O-ring, green, 4 x 4 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200010515	Oxygen lance sealing, 10 pc.
200005999	Quad-ring, black, 7.65 x 1.78 mm
200011004	Set of half shells 10 mm, Set of half shells for UNICUBE®, vario MICRO cube, rapid OXY cube®, vario PYRO cube®, vario ISOTOPE select, vario TOC cube and vario TOC select.

Wear Parts

Article No.	Article Description
200013277	O-ring, black, 10.3 x 2.4 mm
200009016	O-ring, green, 10.5 x 2 mm
200010662	O-ring, green, 17.3 x 2.4 mm
200005338	O-ring, green, 29.5 x 3
200008228	Quad-ring, black, 18.2 x 3.53 mm
200015305	Quad-ring, black, 29.74 x 3.53 mm
200010340	rOXYcu-wearparts Set of O-rings/small wear parts for vario PYRO cube / rapid OXY cube
200015296	vPYRcu-maint Maintenance kit for vario PYRO cube – contains all wear parts which have to be exchanged in conjunction with a maintenance call.

EA-IRMS inlets

vario PYRO cube®

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200010395	Crucible tongs for crucibles, D = 12 mm
200010902	Face spanner for adjustment of the ball
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200009077	Leakage set for vario EL cube, vario MACRO cube, vario PYRO cube®, rapid OXY cube® and vario ISOTOPE cube.
200005162	Leather gloves, 1 pair
200009549	manpress-10.5mm-60pos Manual pressing tool, D = 10.5 mm for manual compressing of samples for 60 position sample carousel. Suitable for foils up to 50 x 50 mm.
100005226	manpress-5mm-pyro Manual pressing tool, D = 5 mm - for manual compressing of samples for pyrolysis (rapid OXY cube and vario PYRO cube in OH mode).
200010997	manpress-7mm-120pos Manual pressing tool, D = 7 mm - for manual compressing of samples for 120 position sample carousel. Suitable for boats up to 8 x 8 x 16 mm and foils up to 35 x 35 mm.
200004971	manpress-9mm-80pos Manual pressing tool, D = 9 mm - for manual compressing of samples for 80 position sample carousel. Suitable for foils up to 35 x 35 mm.
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes.
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g

Chromatography inlets

Compound specific isotope analysis is a powerful technique which allows complex mixtures of organic compounds to be separated and then isotopically analyzed. Compound separation is done via GC or LC techniques prior to fractionation-free real-time conversion of the compound to gaseous phase. Our systems offer exceptional sensitivity and chromatography.



GC5

The highest sensitivity GC-IRMS system

Your benefits

- Online measurement of $\delta^{13}\text{C}$, $\delta^{15}\text{N}$, $\delta^2\text{H}$ and $\delta^{18}\text{O}$ in compounds separated by GC
- Agilent 8890 GC with split/splitless, PTV or on-column injectors
- High temperature $\delta^2\text{H}$ pyrolysis of compounds at 1,450 °C
- Optimized to maintain chromatographic integrity

Chemicals & Reagents

Article No.	Article Description
200010744	80% Nickel / 20% Chromium wire, 0.125 mm diameter, 1 m
200014445	ChromeHD pellets, 0.5 g For filling quartz GC furnace tubes for dD analysis using low temp pyrolysis
200007637	Copper wire, 0.125 mm diameter, 1 m
200008002	Platinum wire, 0.125 mm diameter, 1 m
200001204	GC-C (L/H) 1000 Injection Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for ^{13}C analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.
200000618	GC-C (R/H) 1000 Injection Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for ^{13}C analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.
200002150	GC-CH₄ (L/H) 1000 Injection Consumables Kit Consumables kit for d ^{13}C and dD analysis of natural gas samples
200003134	GC-CH₄ (R/H) 1000 Injection Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for ^{13}C and HD analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.
200001311	GC-H (L/H) 1000 Injection High Temperature Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for high-temperature dD analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.
200001687	GC-H (L/H) 1000 Injection Low Temperature Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for HD analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.

Article No.	Article Description
200001470	GC-H (R/H) 1000 Injection High Temperature Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for HD analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.
200001026	GC-H (R/H) 1000 Injection Low Temperature Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for HD analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.
200002711	GC-N (L/H) 1000 Injection Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for ^{15}N analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.
200001181	GC-N (R/H) 1000 Injection Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for ^{15}N analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.
200001823	GC-O (L/H) 1000 Injection Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for ^{18}O analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.
200002471	GC-O (R/H) 1000 Injection Consumables Kit Includes furnace tubes, reagents, ferrules and silica for approximately 1000 sample injections for ^{18}O analysis. NB. Depends on sample size and derivatisation agents used. Does not include GC separation column.
200001934	Set of small parts for all GC configurations A kit of all standard ferrules, fused silica and nuts used across all GC-IRMS configurations

Chromatography inlets

GC5

Measurement Standards & Reference Materials

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA) and other external providers. Supply of these materials is dependent on the material being in stock at the provider. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

Article No.	Article Description
200004043	IRMS RM, Alkane Mix A for GC-IRMS, d13C, d2H C16-C30 alkanes in equal concentrations of 0.7 mg in 0.5 ml per compound, certified for $\delta^{13}\text{C}$ and $\delta^2\text{H}$ isotopes. Ideal for isotopic calibration of GC-IRMS instruments. Supplied in 0.5 ml hexane. Sourced from and certified by the University of Indiana.
200002288	IRMS RM, Alkane Mix B for GC-IRMS, d13C, d2H C16-C30 alkanes varying in concentration from 0.2 to 0.7 mg in 0.5 ml per compound, certified for $\delta^{13}\text{C}$ and $\delta^2\text{H}$ isotopes. Ideal for isotopic calibration of GC-IRMS instruments. Supplied in 0.5 ml hexane. Sourced from and certified by the University of Indiana.
200000533	IRMS RM, Alkane Mix C for GC-IRMS, d13C, d2H C17, C19, C21, C23, C25 n-alkane compounds in equal concentrations of 0.7 mg in 0.5 ml per compound, certified for $\delta^{13}\text{C}$ and $\delta^2\text{H}$ isotopes. Ideal for isotopic calibration of GC-IRMS instruments. Supplied in 0.5 ml hexane. Sourced from and certified by the University of Indiana.
200002991	IRMS RM, FAME mix 0.05mg for GC-IRMS, d13C, d2H Mixture of C14, C16, C18, C20 FAME and FAEE compounds in equal concentrations of 0.05 mg in 0.5 ml per compound, certified for $\delta^{13}\text{C}$ and $\delta^2\text{H}$ isotopes. Ideal for isotopic calibration of GC-IRMS instruments. Supplied in 0.5 ml hexane. Sourced from and certified by the University of Indiana.
200001946	IRMS RM, FAME mix 0.7mg for GC-IRMS, d13C, d2H Mixture of C14, C16, C18, C20 FAME and FAEE compounds in equal concentrations of 0.7 mg in 0.5 ml per compound, certified for $\delta^{13}\text{C}$ and $\delta^2\text{H}$ isotopes. Ideal for isotopic calibration of GC-IRMS instruments. Supplied in 0.5 ml hexane. Sourced from and certified by the University of Indiana.

Reaction Tubes & Accessories

Article No.	Article Description
200014014	GC5 Furnace tube carrier assembly, LH
200007908	GC5 Furnace tube carrier assembly, RH (GC5 R/H)
200014227	GC5 furnace tube, empty, quartz, LH
200011281	GC5 furnace tube, empty, quartz, RH (GC5 R/H)
200005397	GC5 furnace tube, high temp C & N analysis, quartz, LH
200002121	GC5 furnace tube, high temp carbon & nitrogen, quartz, RH
200013227	GC5 furnace tube, high temp hydrogen, ceramic, LH
200011853	GC5 furnace tube, high temp hydrogen, ceramic, RH
200002925	GC5 furnace tube, low temp carbon, quartz, LH
200000180	GC5 furnace tube, low temp carbon, quartz, RH
200006362	GC5 furnace tube, low temp hydrogen, quartz, LH
200008159	GC5 furnace tube, low temp hydrogen, quartz, RH
200007566	GC5 furnace tube, oxygen, alsint, LH
200012380	GC5 furnace tube, oxygen, alsint, RH
200005516	GC5 furnace tube, oxygen, nickle, LH
200007829	GC5 furnace tube, oxygen, nickle, RH

Chromatography inlets

GC5

Seals & Connectors

Article No.	Article Description
200014557	Brass nut, 1/16"
200014847	Ferrule set, stainless steel, 1/8"
200004142	Ferrule, 2 hole, graphite vespel, 1/16" x (2) 0.004"
200013761	Ferrule, blank, PTFE, 1/16"
200012995	Ferrule, graphite, 1/4" - 1/4"
200010542	Ferrule, graphite vespel, 1/8" - 1/8"
200011266	Ferrule, graphite vespel, 1/16" x 0.005"
200005047	Ferrule, graphite, 1/16" x 0.005"
200007928	Ferrule, PTFE, 5/16" x 5/16"
200008347	Ferrule, vespel, 1/4" - 1/4"
200010426	Ferrule, vespel, 1/4"

Gas / Liquid Flow Handling

Article No.	Article Description
200011591	Capillary, deactivated fused silica, 320 um
200004945	Capillary, fused silica, 220 um x 320 um
200003462	Capillary, fused silica, 25 um x 363 um
200006938	Capillary, fused silica, 250 um x 350 um
200005590	Capillary, fused silica, 320 um x 430 um
200007868	GC5 capillary splitter union, 0.5 mm
200014119	Inline particle filter, brass, 1/8"
200011040	M5 Air Adaptor
200007513	Open split vent tube
200014914	Tube, polyurethane, blue, 1/4"

Sample Delivery

Article No.	Article Description
200010088	Gas tight syringe, 500 ul
200001539	Gas tight syringe, 250 ul
200000694	Gas tight syringe, 100 ul
200000207	Gas tight syringe, 10 ul

Chromatography inlets



iso CHROM® LC

Trace analysis in perfection

Your benefits

- The only LC-IRMS interface to use high-temperature combustion to convert separated compounds to CO₂
- Robust analysis and significantly improved maintenance intervals
- Exceptional chromatography performance
- Ideal for high throughput LC-IRMS analysis

Chemicals & Reagents

Article No.	Article Description	Article No.	Article Description
200014271	Copper, 100 g	100004541	Rezex™ RCM Monosaccharide Ca ⁺ LC column, 300 x 7.8 mm, preconditioned
200012217	Copper, 500 g	200005872	Silver wool, 50 g
200007521	Quartz chips, 2 - 4 mm, 50 g	200000265	iCHROM-2k-C Includes all necessary consumables (chemicals, reaction tubes, Ca-cartridges) for approximately 2000 honey analyses. A new HPLC column must be ordered separately.
200004827	Quartz wool, 10 g		

Measurement Standards & Reference Materials

Article No.	Article Description
100004512	Test sample iCHROM, sugar mix maltose; glucose; fructose

Reaction Tubes & Accessories

Article No.	Article Description
200007844	Reduction tube (quartz)
100002855	Combustion tube, iCHROM
100003300	Quartz bridge, iCHROM, iø 2 mm, for combustion tubes iso CHROM LC

Wear Parts

Article No.	Article Description	Article No.	Article Description
100006850	Capillary fused silica, for iso CHROM LC injector	100006849	O-ring, black, 6 x 1.5 mm
100004277	Cartridge holder Stainless steel holder, complete with tools and connectors	200014191	O-ring, black, 7.59 x 2.62 mm
100004722	Ca-scavenger cartridges, 10 pc.	100004296	O-ring, black, 20 x 2 mm; black
100004508	Ferrule 1/16" Graphite, 10 pc./package	20008314	O-ring, green, 4.5 x 1.5 mm
200002476	Ferrule set, PTFE, 1/4"	200005999	Quad ring, black, 7.65 x 1.78 mm
100006852	Ferrule graphite, for injector iso CHROM LC	200001056	Union, valco, 1/16" x 0.15 mm bore
100004037	Hose kit for peristaltic pump	100008429	iCHROM-maint includes all wear parts which have to be exchanged in conjunction with a maintenance call

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200002667	Fused silica capillary cutting tile
100004956	Tube support for combustion tube
200005833	Vacuum grease, 2 g

Chromatography inlets



LiquiFace

High performance carbon isotope analysis of LC separated compounds

Your benefits

- Liquid chromatography interface for $\delta^{13}\text{C}$ measurements
- Fractionation-free wet chemical oxidation at 90 °C
- Direct injection mode for bulk isotope measurements
- Excellent chromatography performance

Chemicals & Reagents

Article No.	Article Description
200001629	LC-C 1000 sample consumable kit Contains all expected consumables for 1k samples. Includes items such as ferrules, tubing and syringe.

Measurement Standards & Reference Materials

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA) and other external providers. Supply of these materials is dependent on the material being in stock at the provider. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

Article No.	Article Description
200001733	IRMS RM, IAEA CH-6 Sucrose, d^{13}C

Sampling & Sample Containers

Article No.	Article Description	Article No.	Article Description
20000776	Bottle 250 ml clear borosilicate	200001350	Bottle 1000 ml clear borosilicate
200004108	Bottle 250 ml amber borosilicate for sodium persulfate solution	200003858	Screw caps for bottles sold individually

Seals & Connectors

Article No.	Article Description	Article No.	Article Description
200002476	Ferrule set, PTFE, 1/4"	200004492	Ferrule, PTFE, 1/8" x 2.5mm
200015138	Ferrule, PTFE, 1/16"	200014704	Ferrule, reducing, PTFE, 1/4" x 1/16"

Gas / Liquid Flow Handling

Article No.	Article Description	Article No.	Article Description
200007355	Capillary, fused silica, 320 μm x 430 μm	200012269	Tube, stainless steel, 0.76 x 0.46 mm
200004304	LiquiFace gas separator membrane, PTFE	200014160	Tube, teflon, 1.8" x 0.094" x 3 m
200013344	Tube, LiquiFace, PVC, 0.5 mm		

Wear Parts

Article No.	Article Description
200000049	1/16" x 0.8 PTFE Ferrule

Headspace analyzers

Headspace analysis is a technique whereby samples for isotopic analysis are prepared into septum sealed vials or flasks. This includes atmospheric gases, breath, fluids and carbonate materials. These systems perform automated sampling, purification and concentration of the analytical species of interest allowing high precision, high sensitivity analysis of a broad range of sample types.



iso FLOW

Stable isotope analysis of carbonate materials, DIC and liquids

Your benefits

- Headspace analyzer for a broad range of sample matrices
- UltiTrap™ technology provides dynamic separation of sample gases
- Carrier He flow controlled by a digital high precision MFC
- 180-position heated sample tray with ± 0.1 °C stability up to 90 °C
- Direct drive pump for precise delivery of acid (optional)

Chemicals & Reagents

Article No.	Article Description
200003198	1000 consumables for breath analysis with the iso FLOW Includes items such as ferrules, fused silica, peek tubing, vials and needles.
200003368	1000 consumables for carbonate analysis with iso FLOW Includes items such as ferrules, fused silica, peek tubing, vials and needles.
200003432	1000 consumables for water analysis with the iso FLOW Includes items such as ferrules, fused silica, peek tubing, vials and needles.
200003403	Set of small parts for iso FLOW Includes basic consumables for any iso FLOW configuration. Comprises ferrules, fused silica and peek tubing.

Measurement Standards & Reference Materials

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA) and other external providers. Supply of these materials is dependent on the material being in stock at the provider. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

Article No.	Article Description
200003415	IRMS RM, IAEA 603, Calcite, $\delta^{13}\text{C}$, $\delta^{18}\text{O}$
200003470	IRMS RM, IAEA NBS18, Calcite, $\delta^{13}\text{C}$, $\delta^{18}\text{O}$
200002484	IRMS RM, USGS32, Potassium sulfate, $\delta^{15}\text{N}$, $\delta^{18}\text{O}$
200002058	IRMS RM, USGS35, Sodium nitrate, $\delta^{15}\text{N}$, $\delta^{18}\text{O}$
200000119	IRMS RM, IAEA-303, Sodium Bicarbonate, $\delta^{13}\text{C}$
200001310	IRMS RM, SLAP2 Water, d^3H , $\delta^{18}\text{O}$
200002812	IRMS RM, VSMOW2 Water, $\delta^2\text{H}$, $\delta^{18}\text{O}$
200000028	IRMS RM, GISP Water, $\delta^2\text{H}$, $\delta^{18}\text{O}$

Gas / Liquid Flow Handling

Article No.	Article Description
200000592	Capillary, fused silica, 100 x 363 μm , 1 m
200006938	Capillary, fused silica, 250 x 350 μm , 1 m
200011710	Needle for carbonate and water analyses
200013426	Needle for breath and air analysis

Headspace analyzers

iso FLOW

Sample Delivery

Article No.	Article Description
200001496	Needle Holder for iso FLOW
200002966	Needle Support Collar for iso FLOW
200000609	Sample rack, 12.5 x 50 mm, 3.7 ml vials – standard iso FLOW vials (heated tray)
200003503	Sample rack, 15.5 x 101 mm, 12 ml vials – standard iso FLOW vials (non heated tray)
200003832	Sample rack, 23.5 x 75 mm, 20 ml vials – optionally available
200001112	Sample rack, 28 x 95 mm, 40 ml vials – optionally available

Sampling & Sample Containers

Article No.	Article Description
200003358	3.7 ml exetainer vial with lid, 50 x 12.5 mm Vial with "exetainer" lid. Sold only in units with 10 pieces.
200003741	12 ml exetainer vial with lid, 100 x 15.5 mm for ¹³ C breath testing. Price is per vial.
100007959	40 ml exetainer vial without lids. Sold in units of 100 vials = 1 pack.
100007958	Lids for 40 ml exetainer vials. Needs to be bought with 100007959.

Wear Parts

Article No.	Article Description
200003242	GFF8 Ferrule

Headspace analyzers



iso FLOW GHG

Stable isotope analysis of atmospheric greenhouse gases

Your benefits

- Cryogenic pre-concentration system for analysis of atmospheric concentrations of CO₂, N₂O and CH₄ greenhouse gases
- Perform high-sensitivity analysis of nitrate via 'bacterial denitrification' technique
- Optional 1,500 °C furnace for δ¹³C analysis of CH₄

Chemicals & Reagents

Article No.	Article Description
100007541	EAS CARBSORBER Ready for use CO ₂ -absorber, 2 x 30 g bottles per pack, granular, free-flowing, 30 g
200013688	Sofnocat, 50 g
200001763	Copper wire, 0.125 mm diameter
200010744	80% Nickel / 20% Chromium wire, 0.125 mm
200008002	Platinum wire, 0.125 mm diameter, 1 m

Measurement Standards & Reference Materials

For most applications for the iso **FLOW GHG** it is recommended using gas mixtures such as synthetic air as a standard. Elementar does not provide these but recommend contacting your local laboratory gas supplier.

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA) and other suppliers. Supply of these materials is dependent on the material being in stock at the supplier. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

For the Enviro**VISION** which constitutes an iso **FLOW GHG** in combination with a Gilson autosampler the following d¹⁵N and d¹⁸O standards are available for purchase. Preparatory chemistry is required to dissolve the materials and produce headspace gas for analysis.

Article No.	Article Description
200002875	IAEA NO-3, Potassium Nitrate, d ¹⁵ N, d ¹⁸ O
200002058	USGS 35, Sodium Nitrate, d ¹⁵ N, d ¹⁸ O

Sampling & Sample Containers

Article No.	Article Description
200006045	100ml stopcock sealed air sample flask
200010088	Gas Tight Syringe, 500µl for manual injection. Requires manual injection port (200002132).
200001539	Gas Tight Syringe, 250µl for manual injection. Requires manual injection port (200002132).
200000694	Gas Tight Syringe, 100µl for manual injection. Requires manual injection port (200002132).
200000207	Gas Tight Syringe, 10µl for manual injection. Requires manual injection port (200002132).
100007959	40ml exetainer vial without lids. Needs to be purchased with 100007958.
100007958	Lids with septa for 40ml Exetainer vials.
200003741	12ml exetainer vial with lids
200001112	40ml vial sample rack for Gilson autosampler. Up to 5 can be configured on any Gilson.
200003503	12ml vial sample rack for Gilson autosampler. Up to 5 can be configured on any Gilson.
200014029	isoFLOW GHG autosampler needle
200001496	Needle holder for iso FLOW GHG

Headspace analyzers

iso FLOW GHG

Reaction Tubes & Accessories

Article No.	Article Description
200000014	Restek™ RT Q Bond GC Column
200004116	Packed methane furnace tube, ceramic. Filled with Cu wire, Ni/Cr wire and Pt wire.
200013815	Empty furnace tube, ceramic
200001249	Upper GHG Nafion™ assembly
200008917	Lower GHG Nafion™ assembly
200000972	J/W GC packed 80/100 mesh column. Secondary GC column only used for N2 upgrade

Wear Parts

Article No.	Article Description
200003242	GFF8 Ferrule
200011266	Ferrule, GVF, 1/16" x 0.005"
200011500	Ferrule, graphite vespel, GVF 16-16
200006031	Ferrule, graphite vespel, 1/16" x 0.8 mm
200001180	Ferrule, graphite vespel, 1/16" x 0.003"
200002476	Ferrule set, PTFE, 1/4"
200001950	Ferrule, reducing, PTFE, 1/8" x 1/16"
200014119	Inline particle filter, brass, 1/8"
200013146	iso FLOW GHG cryotrap heater wire. Recommended to use 90 cm (3 ft) per trap. Can be bought in cm or m.

Gas / Liquid Flow Handling

Article No.	Article Description
200014697	PEEK tubing, orange, 1/16" x 0.020"
200005590	Capillary, fused silica, 320 um x 430 um
200014302	Liquid nitrogen dewar
200001868	PTFE blue 1/8" OD tube for system blank measurements

Dual inlet analyzers

Dual inlet technology is the ultimate solution for those applications looking for the highest possible precision and sensitivity for isotope analysis of pure gases. This is due to the unique ultra-low volume change-over valve which performs multiple comparisons between sample and reference gas to drive down analytical precision. Our dual inlet system has the smallest footprint making it an ideal choice for busy laboratories.



iso DUAL INLET

High precision pure gas analysis

Your benefits

- The most compact dual inlet system on the market
- Micro-volume cryogenic cold finger enables the analysis of very small (5 µg) carbonate samples
- The world's most highly precise $\delta^{18}\text{O}$ analysis of water samples
- Capacity for up to 180 samples (sample vials sealed with septum)

Chemicals & Reagents

Article No.	Article Description
200003568	Dual Inlet Consumables Kit 1 years consumables kit for the Dual Inlet
200002566	Cracker 1 year spares kit
200000164	iso CARB PREP consumables kit for 1,000 analyses

Article No.	Article Description
200002529	iso AQUA PREP consumables kit (d180) for 1,000 analyses
200002260	iso AQUA PREP consumables kit (d180 and d2H) for 1,000 analyses
200000131	iso MULTI PREP consumables kit for 1,000 analyses
200001935	Sample Manifold 1 Years Spares Kit

Measurement Standards & Reference Materials

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA) and other external providers. Supply of these materials is dependent on the material being in stock at the provider. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

Article No.	Article Description
200003415	IRMS RM, IAEA 603, Calcite, d13C, d18O
200003470	IRMS RM, IAEA NBS18, Calcite, d13C, d18O
200003536	IRMS RM, IAEA LSVEC, lithium carbonate standard, d13C
200001310	IRMS RM, SLAP2 Water, d13H, d18O
200002812	IRMS RM, VSMOW2 Water, d2H, d18O
200000028	IRMS RM, GISP Water, d2H, d18O

Sampling & Sample Containers

Article No.	Article Description
200010686	MultiCarb Needle (Reduced Bore) For use with slow acid pump delivery routine
200011710	Needle for carbonate and water analysis This needle is used for the following applications: <ul style="list-style-type: none"> • iso FLOW: Used for carbonate, water and breath analysis • Dual Inlet Carbonates: For use with fast acid delivery routine (i.e. MultiCarb without dry gas purge on FC/FH valve) • MultiFlow: Used for carbonate and water analysis
200008196	Needle, AquaPrep

Article No.	Article Description
200003503	44 x 12 ml vial sample rack for GX-271 autosampler
200002959	Septa, blue, 7/16"
200001003	Septa, PCTFE, 100 pc./package
200003358	3.7 ml exetainer vial with lid, 50 x 12.5 mm, 10 pc./package
200003325	Vial, V-bottom, glass, 1.0 ml

Headspace analyzers

iso DUAL INLET

Wear Parts

Article No.	Article Description
200010091	Acid delivery line sealing ferrule, peek
200007486	Carrier Assembly for Dual Inlet valves
200000100	Encapsulated tube seal, PTFE For manifold/cracker glassware
200004605	Ferrule, PTFE, 1/4" x 3/16"
200010932	Ferrule, PTFE, 5/16" x 3/16"
200010711	Ferrule, PTFE, 5/16" x 5/16"
200006656	Finger tight nut, peek
200008903	Microferrule, peek, 1/32"
200004228	O-ring, viton, 27.5 x 3 mm
200005069	Ring seal, gold, 1/4" x 0.5 mm
200001413	Ring seal, gold, 19.75 x 0.5 mm
200004946	Ring seal, gold, 36.0 x 0.5 mm For sealing AquaPrep/MultiCarb water trap cryo probe
200004766	Ring seal, gold, 9.9" x 0.5 mm
200007660	Valve diaphragm for Dual Inlet

Sample Delivery

Article No.	Article Description
200006137	Cracker tube assembly
200003600	Dual Inlet Acid Catch Pot Vial holder used for capturing acid vapour blown out of the needle
200004103	Dual Inlet needle fitting kit Uses reduced bore needle. Includes all ferrules, unions and tubing to replace needle assembly
200004513	Dual Inlet acid pump kit

Legacy instruments



rapid N cube

Successor: **rapid N exceed**[®] (pageSeite 43)

Chemicals & Reagents

Article No.	Article Description
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200014271	Copper, 100 g
200010245	Corundum balls, 50 g
200009555	Corundum balls, 500 g
200013169	Cotton wool, 50 g
200007811	Pt catalyst 5 %, 30 g
200004827	Quartz wool, 10 g
200011934	rNcu-4k Set of consumables for rapid N cube - contains chemicals for approximately 4000 samples, except EAS WETSORBER.
200005872	Silver wool, 50 g
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200010174	Tungsten kit, (granulate + spacers)
200010974	Tungsten, 500 g, granulated

Measurement Standards & Reference Materials

Article No.	Article Description
200007435	Acetanilide, 5 g test standard for elemental analysis.
200005806	Glutamic acid, 250 g purity >99 %

Sampling & Sample Containers

Article No.	Article Description
200008184	Tin capsules, V = 0,1 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200011221	Tin foil, 50 x 50 mm, 450 pc. Tin foil for elemental analysis - 50 x 50 mm, 450 pc./package
200011991	vMULcu-SNfpaper Nitrogen / sulfur free paper for elemental analysis, 60 x 60 mm, 500 pc./package - used with solid sample former for wrapping of solid samples to avoid cross contaminations and to minimize ash.

Legacy instruments

rapid N cube

Reaction Tubes & Accessories

Article No.	Article Description
200005197	Ash crucible, steel, rNcu
200014970	Combustion-, post combustion tube
200011489	Drying tube, L = 348 mm
200013977	Filter tube 42 mm compl. incl. grey caps, seal and silver wool filling
200011987	Filter tube GL 14, L = 42 mm, compl. Filter tube, complete with caps and connectors
200010584	Glass tube, L = 150 mm
200014764	O ₂ lance, 140 mm
200004159	O ₂ lance, 150 mm
200005586	Plug for reduction tube, bottom
200005339	plug for reduction tube, top
200013679	Post combustion tube, steel
200004147	Quartz glass bridge, 65 mm
200008838	Reduction tube for filling with tungsten
200011961	Spacer
200010457	Spacer, 25 pc.
200011310	Wire mesh ronde, D = 22 mm

Spare Parts

Article No.	Article Description
200014279	Cone gasket
200010515	Oxygen lance sealing, 10 pc.
200005999	Quad-ring, black, 7.65 x 1.78 mm

Wear Parts

Article No.	Article Description
200011633	O-ring, black, 4 x 1 mm
200014191	O-ring, black, 7.59 x 2.62 mm
200015397	O-ring, green, 4 x 4 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200013842	O-ring, green, 6 x 3
200006004	O-ring, green, 7.5 x 2.5 mm
200009565	O-ring, green, 8 x 2 mm
200008183	O-ring, green, 9.19 x 2.62 mm
200007904	O-ring, green, 16 x 3 mm
200013028	O-ring, green, 18 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200007217	O-ring, green, 22 x 2 mm
200005876	rNex-wearparts Set of O-rings/small wear parts rapid N exceed and rapid N cube
200012673	Set of half shells 15 mm

Legacy instruments

rapid N cube

Auxiliaries

Article No.	Article Description
200013405	Clamp (glass tube)
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200010902	Face spanner for adjustment of the ball
200015256	Filter, diameter 18 mm
200011867	Forming tool for sample cups to form tin foil cups from tin foil
200010252	Funnel, D = 65 mm
200006785	Gloves, temperature resistant, 1 pair
200004417	insert for spacer, D=29,5 mm insert separator, 29 mm
200007483	Leakage check kit rapid N exceed
200005162	Leather gloves, 1 pair
200009657	Manually operated drilling device for cleaning steel tubes
200013850	Sample plate for 24 samples, with cover
200004325	Spoon, approx. measure for 20 g tungsten
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes.
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g

Legacy instruments



vario MAX

Successor: **vario MAX cube** (pageSeite 36)

Chemicals & Reagents

Article No.	Article Description
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200014271	Copper, 100 g
200010245	Corundum balls, 50 g
200013169	Cotton wool, 50 g
100007805	EAS WETSORBER® Ready for use water absorber with indicator for C-, H-, N-, O- elemental analysis, 230 g
100007821	EAS WETSORBER® S Ready for use water absorber with indicator for C-, H-, N-, S- elemental analysis and isotope ratio analysis, 220 g
200007811	Pt catalyst 5 %, 30 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g
200010174	Tungsten kit, (granulate + spacers)
200010974	Tungsten, 500 g, granulated
200008986	WO ₃ -granulate, for filling comb. tube

Calibration Sets

Article No.	Article Description
200013228	std-soil-lowTOC Soil standard, 30 g - approx. 1.5 % C, can differ slightly depending on batch.

Measurement Standards & Reference Materials

Article No.	Article Description
200007435	Acetanilide, 5 g test standard for elemental analysis.
200009765	Aspartic acid, 100 g
200007042	LNS standard, 5 g approx. cont. in % C: 67.65 H: 4.95 N: 0.72 S: 0.84 O: 25.84
200005305	std-soil-2.1 Soil standard 2.1 (30 g), ~1 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.
200014800	std-soil-2.4 Soil standard 2.4 (30 g), ~3 % C, ~0.2 % N, ~0.03 % S, composition is batch dependent.
200006419	std-soil-5M Soil standard 5M (30 g), ~2 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.
200005583	Sulfadiazine, 100 g
200005129	Sulfanilamide, 10 g test standard for elemental analysis.
200014950	Sulfanilic acid, 5 g test standard for elemental analysis.

Legacy instruments vario MAX

Reaction Tubes & Accessories

Article No.	Article Description
200007844	Combustion / reduction tube (quartz)
200005357	Combustion tube, CHN / CNS vario MAX
200014722	Combustion tube, N/CN vario MAX
200014729	Drying tube, compl.
200009548	Gripper arm - vario MAX CNS
200005508	Gripper arm for CN/N - CHN vario MAX
200013679	Post combustion tube, steel
200009235	Quartz bridge, 130 mm
200004147	Quartz glass bridge, 65 mm
200008838	Reduction tube for filling with tungsten
200011961	Spacer
200010457	Spacer, 25 pc.
200014607	U-tube compl., water separator
200013606	U-tube, GL 18
200011310	Wire mesh ronde, D = 22 mm
200006395	Wire mesh ronde, D = 26.8 mm

Sampling & Sample Containers

Article No.	Article Description
200014515	MAX-crucisol Crucibles, steel - 100 pc./package for vario MAX cube / rapid MAX N exceed.
200006654	vMAXcu-crucisol-cera crucibles, ceramic, 35 mm high, 100 pieces/ package
200007481	vMAXcu-crucisol-cera-special Crucibles, ceramic, for special applications - 100 pieces/ package

Spare Parts

Article No.	Article Description
200011633	O-ring, black, 4 x 1 mm
200013072	O-ring, black, 5.5 x 1.0
200015397	O-ring, green, 4 x 4 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200006004	O-ring, green, 7.5 x 2.5 mm
200008183	O-ring, green, 9.19 x 2.62 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200007224	O-ring, green, 20 x 2 mm
200007217	O-ring, green, 22 x 2 mm
200015181	O-ring, green, 24 x 3
200010589	O-ring, red, 7 x 1.5 mm
200013687	O-ring, red, 16 x 2 mm
200008068	O-ring, red, 32 x 3 mm
200005999	Quad-ring, black, 7.65 x 1.78 mm

Legacy instruments vario MAX

Auxiliaries

Article No.	Article Description
200014860	Adjustment tool for sample holder
200009514	Brass brush
200014382	Clamp, large
200014254	Clamp, small
200015256	Filter, diameter 18 mm
200010252	Funnel, D = 65 mm
200004594	Funnel, GL 14
200014862	Funnel, GL 18
200006785	Gloves, temperature resistant, 1 pair
200010412	Leackage set vario MAX
200005162	Leather gloves, 1 pair
200009657	Manually operated drilling device for cleaning steel tubes
200011462	Measuring tube post combustion CNS Measuring tube for filling the post combustion tube in CNS mode
200010100	Micro spatula
200010238	Sample tray for 18 samples
200007700	Spiral drill, 0.8 mm for nozzle cleaning
200004325	Spoon, approx. measure for 20 g tungsten
200011912	Tool holding device, 100 mm for spiral drill (200007700)
200006018	Tube rack to store cold/hot reaction tubes.
200010676	Tweezers, L = 145 mm

Legacy instruments



vario MICRO cube / rapid MICRO N cube

Successor: UNICUBE® / UNICUBE® trace (pageSeite 15 / page Seite 21)

Consumables Sets

Article No.	Article Description
200011337	vMICcu-4k-CHN Set of consumables for vario MICRO cube – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses (depending on sample weight and matrix) in C
200013964	vMICcu-4k-CHNS Set of consumables for vario MICRO cube – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses (depending on sample weight and matrix) in C
200015014	vMULcu-1k-CI Set of consumables for option CI – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 1000 analyses of solid samples (depending on sample weight and matrix).
200003045	vMULcu-1k-0 Set of consumables for option 0 – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 1000 analyses of solid samples.
200014569	vMULcu-4k-CHN-VLS Set of consumables for vario Liquid Sampler – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of liquid samples in CHN/CN mode.
200009355	vMULcu-4k-CHNS-VLS Set of consumables for vario Liquid Sampler – contains all necessary consumables (chemicals, sample containers, reaction tubes) for approximately 4000 analyses of liquid samples in CHNS/CNS mode.

Chemicals & Reagents

Article No.	Article Description
200004773	Aluminium oxide wool, 20 g
200005447	Carbon black, 65 g, ash-free
200014271	Copper, 100 g
200012217	Copper, 500 g
200010245	Corundum balls, 50 g
200013169	Cotton wool, 50 g
200009133	Graphite felt, D = 26 mm, 12 pc.
200011666	Polyethylene, 10 g
200008269	Quartz chips, 1 – 2 mm, 100 g
200004827	Quartz wool, 10 g
200009010	Tin foil cups, 35 x 35 mm, 100 pc.
200008986	W ₀₃ -granulate, for filling comb. tube
200009890	W ₀₃ -powder, sample additive, 25 g
200012531	W ₀₃ -powder, sample additive, 90 g

Legacy instruments

vario MICRO cube / rapid MICRO N cube

Calibration Sets

Article No.	Article Description
200015394	Standard calibration set for vario MICRO Standard calibration set for vario MICRO cube, CHNS mode: 3 – 6 mg Acetanilide and 0,1 – 5 mg Sulfanilamide.
200012243	vMULcu-cal-IR-0 Standard calibration set for option 0-IR: 0.03 mg – 10 mg acetanilide
200010162	vMULcu-cal-IR-S Standard calibration set for option S-IR: 0.1 – 3.0 mg sulfanilic acid and 1 – 100 mg sulfanilic acid solution 1 mg/ml
200008487	vMULcu-cal-IR-S/O Standard calibration set for option S/O-IR: 0.1 – 3.0 mg sulfanilic acid, 1 – 100 mg sulfanilic acid solution 1 mg/ml and 0.03 – 10 mg acetanilide
200009852	vMULcu-cal-TCD-0 Standard calibration set for option 0-TCD: 0.1 – 19 mg benzoic acid

Measurement Standards & Reference Materials

Article No.	Article Description
200007435	Acetanilide, 5 g test standard for elemental analysis.
200011700	Benzoic acid, 5 g test standard for elemental analysis (0).
200007042	LNS standard, 5 g approx. cont. in % C: 67.65 H: 4.95 N: 0.72 S: 0.84 O: 25.84
200005305	std-soil-2.1 Soil standard 2.1 (30 g), ~1 % C, ~0,1 % N, ~0,01 % S, composition is batch dependent.
200014800	std-soil-2.4 Soil standard 2.4 (30 g), ~3 % C, ~0.2 % N, ~0.03 % S, composition is batch dependent.
200006419	std-soil-5M Soil standard 5M (30 g), ~2 % C, ~0.1 % N, ~0.01 % S, composition is batch dependent.
200013228	std-soil-lowTOC Soil standard, 30 g – approx. 1.5 % C, can differ slightly depending on batch.
200005129	Sulfanilamide, 10 g test standard for elemental analysis.
200014950	Sulfanilic acid, 5 g test standard for elemental analysis.

Sample Handling

Article No.	Article Description
200012150	VLSvials-1.5ml Sample vials 1.5 ml, screw – cap with septum, 100 pc./package

Sampling & Sample Containers

Article No.	Article Description
200012803	Aluminum capsules, V = 0.07 ml, 250 pc.
200013554	Aluminum boats, 4 x 4 x 11 mm, 1000 pc.
200009311	Aluminum boats, 6 x 6 x 12 mm, 500 pc.
200005417	Aluminum capsules, V = 0.03 ml, 250 pc.
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.

Legacy instruments

vario MICRO cube / rapid MICRO N cube

Sampling & Sample Containers

Article No.	Article Description
200013336	Silver boats, 4 x 4 x 11 mm, 500 pc.
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200011391	Silver capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples.
200014886	Silver capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200009772	Silver capsules, 8 x 5 mm V = 0.12 ml, 250 pc., only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200007257	Tin boats, rigid, 4 x 4 x 11 mm, 1000 pc
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc. wall thickness 0.02 mm
200006523	Tin capsules, 5 x 3.5 mm, 500 pc. V = 0.04 ml, only for solid samples.
200006458	Tin capsules, 11 x 8 mm, 100 pc. V = 0.5 ml, only for solid samples
200009914	Tin capsules, 3.75 x 3.5 mm, 100 pc. V = 0.03 ml, only for solid samples.
200009172	Tin capsules, 8 x 5 mm, 250 pc. V = 0.12 ml, only for solid samples.
200008184	Tin capsules, V = 0,1 ml, 250 pc.
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc. Tin foil for elemental analysis – 35 x 35 mm, 450 pc./package
200011221	Tin foil, 50 x 50 mm, 450 pc. Tin foil for elemental analysis – 50 x 50 mm, 450 pc./package
200013421	vMULcu-conset-EA Selection of sample containers – includes a selection of sample boats and capsules in different sizes and materials for packing of solid and liquid samples.

Legacy instruments

vario MICRO cube / rapid MICRO N cube

Reaction Tubes & Accessories

Article No.	Article Description
200009138	Ash crucible, ceramic, slotted
200012389	Ash crucibles, quartz, 30 mm
200014555	Ash finger, 60 mm, slotted
100005768	Comb. tube with filling instr. CHNS/CHN Labeled quartz combustion tube suitable for UNICUBE / vario MICRO cube / vario EL cube / vario ISOTOPE select / vario ISOTOPE cube
200007844	Combustion / reduction tube (quartz)
200013540	Drying tube, 100 mm glass tube only!
200013456	Drying tube, 300 mm glass tube only!
200014764	O ₂ lance, 140 mm
200004159	O ₂ lance, 150 mm
200012140	O ₂ lance, 170 mm
200014026	Protective tube, 105 mm, slotted
200004147	Quartz glass bridge, 65 mm
100005770	Red. Tube with filling instr. CHNS/CHN Labeled quartz reduction tube, suitable for UNICUBE / vario MICRO cube / vario EL cube / vario ISOTOPE select / vario ISOTOPE cube .
200011820	Support tube, 65 mm

Spare Parts

Article No.	Article Description
200015178	Ball for ball valve, 10 mm blind hole
200014279	Cone gasket
200011633	O-ring, black, 4 x 1 mm
200014191	O-ring, black, 7.59 x 2.62 mm
200015397	O-ring, green, 4 x 4 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200006094	O-ring, green, 5 x 1.5 mm
200008183	O-ring, green, 9.19 x 2.62 mm
200009924	O-ring, green, 9.25 x 1.78 mm
200007224	O-ring, green, 20 x 2 mm
200007469	O-ring, green, 24 x 2 mm
200010515	Oxygen lance sealing, 10 pc.
200005999	Quad-ring, black, 7.65 x 1.78 mm
200011004	Set of half shells 10 mm, Set of half shells for UNICUBE®, vario MICRO cube, rapid OXY cube®, vario PYRO cube®, vario ISOTOPE select, vario TOC cube and vario TOC select.

Wear Parts

Article No.	Article Description
200005939	vMICcu-wearparts Set of O rings and small wear parts for vario MICRO cube / vario ISOTOPE select

Legacy instruments

vario MICRO cube / rapid MICRO N cube

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200010902	Face spanner for adjustment of the ball
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200004869	Leakage set UNICUBE / vISOsel
200005162	Leather gloves, 1 pair
200010997	manpress-7mm-120pos Manual pressing tool, D = 7 mm - for manual compressing of samples for 120 position sample carousel. Suitable for boats up to 8 x 8 x 16 mm and foils up to 35 x 35 mm.
200004971	manpress-9mm-80pos Manual pressing tool, D = 9 mm - for manual compressing of samples for 80 position sample carousel. Suitable for foils up to 35 x 35 mm.
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200013203	Support rod, combustion tube, 110 mm
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200006018	Tube rack to store cold/hot reaction tubes.
200010676	Tweezers, L = 145 mm
200006998	Vacuum grease, 35 g

Legacy instruments



vario TOC select

Successor: **enviro TOC** (pageSeite 51)

Chemicals & Reagents

Article No.	Article Description
200004773	Aluminium oxide wool, 20 g
200008689	Aquatak (drying agent), 50 g drying agent without indicator
200010160	Brass wool, 50 g
200013646	Cerium (IV)oxide (granular) 30 ml
200009554	Copper oxide, fine, 250 g Highly pure copper oxide for elemental analysis
200004784	Grease paste, 2 g, for syringe spindle
200006776	Magnesium perchlorate, w. indicator, 50g Drying agent with indicator, 50g, dangerous goods packaging
200006308	Pt-catalyst, 1 % Pt, 25 gfor TOC systems
200007521	Quartz chips, 2 - 4 mm, 50 g
200004827	Quartz wool, 10 g
200005872	Silver wool, 50 g
200015214	vTOCcu-10k-CN-liquid Set of consumables vario TOC cube for approximately 10000 liquid samples - includes all necessary consumables for approx. 10000 liquid samples.
200009443	vTOCcu-2k-C-solid Set of consumables vario TOC cube for approx. 2000 solid samples C - contains all necessary consumables for approx. 2000 solid samples. Drying agent and silver wrapping material for TOC analysis needs to be ordered separately.
200010729	vTOCcu-3k-CN-liquid Set of consumables vario TOC cube for approx. 3000 liquid samples CN
200004180	vTOCcu-5k-C-solid Set of consumables vario TOC cube for approx. 5000 solid samples C - contains all necessary consumables for approx. 5000 solid samples. Drying agent and silver wrapping material for TOC analysis need to be ordered separately.

Calibration Sets

Article No.	Article Description
200006466	std-calciumcarbonate Calcium carbonate - 10 g
200009208	std-KHP Potassium hydrogen phthalate - 10 g
200007465	std-sodiumcarbonate Sodium carbonate - 10 g
200013228	std-soil-lowTOC Soil standard, 30 g - approx. 1.5 % C, can differ slightly depending on batch.
200004813	TOC-cal-ext TOC calibration kit, low, extended, vario TOC cube / vario TOC select / enviro TOC - certified 5-point calibration consisting of a blank, one 0.5 ppm, one 1 ppm, one 2 ppm, one 5 ppm, and one 10 ppm standard in 40 ml vials, preserved in HCl, shelf life: max 8 weeks in fridge
200006434	TOC-cal-high TOC calibration kit, high, vario TOC cube / vario TOC select / enviro TOC - certified 3-point calibration consisting of a blank, one 10 ppm, one 50 ppm, and one 100 ppm standard in 40 ml vials, preserved in HCl, shelf life: max 8 weeks in fridge

Legacy instruments

vario TOC select

Calibration Sets

Article No.	Article Description
200012582	TOC-cal-low TOC calibration kit, low, vario TOC cube / enviro TOC – certified 3-point calibration consisting of a blank, one 1 ppm, one 5 ppm, and one 10 ppm standard in 40 ml vials, preserved in HCl, shelf life: max 8 weeks in fridge
200004552	TOC-std-100ppm Certified 100 ppm TOC standard, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, unpreserved, shelf life: max 8 weeks in fridge
200008247	TOC-std-10ppm Certified 10 ppm TOC standard, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, preserved in HCl, shelf life: max 8 weeks in fridge
200009701	TOC-std-1ppm Certified 1 ppm TOC standard, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, preserved in HCl, shelf life: max 8 weeks in fridge
200011245	TOC-std-blk Certified TOC blank, vario TOC cube / vario TOC select / enviro TOC – 40 ml vial, preserved in HCl, shelf life: max 8 weeks in fridge

Sample Handling

Article No.	Article Description
200011728	Magnetic stir bar 15 x 6 mm
100001879	Suction needle compl., platinum for special use cases

Sampling & Sample Containers

Article No.	Article Description
200008484	Cover foil, 1500 pc./package
200007795	Erlenmeyer flask, 250 ml
200014608	Purge needle
200007327	Sample vials, 12 ml, 100 pc./package
200004738	Sample vials 40 ml, 100 pc./package
200008833	Silver boats, 4 x 4 x 5 mm, 500 pc.
200007754	Silver boats, 6 x 6 x 12 mm, 114 pc.
200013395	Silver boats, 8 x 8 x 16 mm, 70 pc.
200010913	Silver boats, 10 x 10 x 20 mm, 42 pc.
200014521	Silver capsules, 5 x 9 mm, 250 pc. V = 0.15 ml, only for solid samples.
200013710	Silver capsules, V = 0.012 ml, 250 pc.
200013909	Silver capsules, V = 0.025 ml, 250 pc.
200007516	Silver capsules, V = 0.04 ml, 250 pc.
200010387	Silver capsules, V = 0.07 ml, 250 pc.
200013930	Silver foil, 40 x 40 mm, 100 pc.
200010032	Suction needle for standard use cases
200011680	Suction needle, septum for use with vial septum
200012399	Test tubes 100 pc./package
200012622	Tin boats assortment 200 x (4 x 4 x 11 mm) 150 x (6 x 6 x 12 mm) 45 x (8 x 8 x 15 mm)
200012350	Tin boats, 8 x 8 x 15 mm, 250 pc.

Legacy instruments

vario TOC select

Sampling & Sample Containers

Article No.	Article Description
200006296	Tin boats, 9 x 10 x 20 mm, 100 pc.
200005903	Tin boats, rigid, 6 x 6 x 12 mm, 500 pc.
200007543	Tin boats, thin, 4 x 4 x 5 mm, 1000 pc.
200014577	Tin boats, thin, 4 x 4 x 11 mm, 1000 pc.
200007074	Tin boats, thin, 6 x 6 x 12 mm, 500 pc.wall thickness 0.02 mm
200014058	Tin capsules, V = 0.025 ml, 250 pc.
100008038	Tin capsules, V = 0.04 ml, 250 pc.
200015479	Tin capsules, V = 0.05 ml, 250 pc.
200008184	Tin capsules, V = 0,1 ml, 250 pc.
200013285	Tin capsules, V = 0.3 ml, 100 pc.
200011997	Tin capsules, V = 0.5 ml, 100 pc.
200013355	Tin capsules, V = 1.0 ml, 100 pc.
200009795	Tin foil cups, 35 x 35 mm, 1000 pc.
200005722	Tin foil, 35 x 35 mm, 450 pc. Tin foil for elemental analysis – 35 x 35 mm, 450 pc./package
200011221	Tin foil, 50 x 50 mm, 450 pc. Tin foil for elemental analysis – 50 x 50 mm, 450 pc./package
200005202	Vials, 8 ml, 200 pc./package

Reaction Tubes & Accessories

Article No.	Article Description
200006378	Acid reservoir, L = 300 mm
200014796	Ash crucible, quartz, slotted
200014555	Ash finger, 60 mm, slotted
200005183	Cannula, 0.5 mm
200007844	Combustion / reduction tube (quartz)
200013456	Drying tube, 300 mm glass tube only!
200013977	Filter tube 42 mm compl. incl. grey caps, seal and silver wool filling
200013470	Filter tube, 38 mm
200006025	Filter tube, 38 mm compl. with connection – hose pipe
200007012	filter tube, 42 mm glass tube with grey caps, only. WITHOUT filling
200011827	Filter tube, with connector
200009425	Glass cooler, straight, compl.
200005233	Glass cooler, straight the glass part, only
200008714	Glass tube, L = 300 mm
200014026	Protective tube, 105 mm, slotted
200012805	Reservoir compl.
200010447	Sparger tube
200004918	Sparger, compl.

Legacy instruments

vario TOC select

Spare Parts

Article No.	Article Description
200011438	Ball for ball valve, 14 mm blind hole
200014836	Fitting 1/8", L = 12 mm
200006829	Gasket, blue
200012903	Gasket, yellow
200005999	Quad-ring, black, 7.65 x 1.78 mm
200015536	Screw coupling 1/16", special material L = 12 mm
200013142	Sealing 1/8", for cannula
200008708	Sealing plug for 1/16" hose pipe
200012574	Sealing plug, black, GL 14
200010811	Set of half shells 14 mm
200007950	Syringe, 5 ml

Wear Parts

Article No.	Article Description
200014191	O-ring, black, 7.59 x 2.62 mm
200008314	O-ring, green, 4.5 x 1.5 mm
200012426	O-ring, green, 5 x 2 mm
200009016	O-ring, green, 10.5 x 2 mm
200007224	O-ring, green, 20 x 2 mm
200009360	Sealing plug
200006729	Syringe piston, compl., 10 mm
200011127	vTOCcu-maint Maintenance kit for vario TOC cube – contains all wear parts which have to be exchanged in conjunction with a maintenance call.
200012643	vTOCcu-maint-spare Spare part kit for vario TOC cube – contains all spare parts which have to be exchanged in conjunction with a maintenance call.
200011955	vTOCcu-wearparts Set of O-rings/ small wear parts for vario TOC and iso TOC instruments.

Auxiliaries

Article No.	Article Description
200014382	Clamp, large
200014254	Clamp, small
200005689	Crucible tongs for change of ash fingers
200015256	Filter, diameter 18 mm
200010252	Funnel, D = 65 mm
200004594	Funnel, GL 14
200006785	Gloves, temperature resistant, 1 pair
200006791	Leak finding set vTOCcu/ isoTOC for vario TOC cube / isoTOC / vario TOC select
200005162	Leather gloves, 1 pair
200010100	Micro spatula
200013850	Sample plate for 24 samples, with cover
200008983	Tamper for filling of Al ₂ O ₃ /quartz wool
200010676	Tweezers, L = 145 mm
200005833	Vacuum grease, 2 g

Legacy instruments



IsoPrime100 IRMS

Successor: **isoprime precisIION** (page Seite 77)

All parts listed below are also compatible with the IsoPrime IRMS.

Chemicals & Reagents

Article No.	Article Description
SIPR-SP100	IsoPrime100 Spares Kit 1 years spares kit for the IsoPrime100 IRMS

Seals & Connectors

Article No.	Article Description
ST1042997	Ferrule set, brass, 1/16"
ST1042998	Ferrule set, brass, 1/8"
S06 00 0253	O-ring, nitrile, 14.1 x 1.6 mm
S5711933	O-ring, viton, 3.0 x 1.0 mm
S5711237	O-ring, viton, degassed, 1.4 x 1.0 mm
S5711325	O-ring, viton, degassed, 1.78 x 1.02 mm
ST3601918	Ring seal, gold, 19.75 x 0.5 mm 9.75mm gold seal
ST1039050	Seal, gold, 22 mm x 0.5 mm Gold ring for IsoPrime/IsoPrime100 Collector Feedthrough

Gas / Liquid Flow Handling

Article No.	Article Description
S6490517	Capillary, fused silica, 150 um x 220 um
S6490516	Capillary, fused silica, 1 m
S6490518	Capillary, fused silica, 25 um x 363 um
S6490515	Capillary, fused silica, 75 um x 190 um, 1 m
S6070170	Ferrule, 2 hole, graphite vespel, 1/16" x 0.004", 0.3 mm
S6070173	Ferrule, graphite vespel, 1/16" x 0.003" / 0.4 mm
ST1042831	Ferrule, graphite vespel, 1/16" x 0.3 mm
S6070737	Ferrule, graphite vespel, 1/16" x 0.3 mm, 16-004
S6070175	Ferrule, reducing, PTFE, 1/8" x 1/16"
ST1040559	Ferrule, wade, brass, 1/8"

Legacy instruments

IsoPrime100 IRMS

Ion Optics

Article No.	Article Description
200001848	Alpha plate For the IsoPrime, IsoPrime100 and xION instrument series
200001324	Alpha plate, 3 mm
200001071	Block Filament Support For use with the IsoPrime/IsoPrime100 instrument series
200002412	Ceramic gas inlet tube For use with the IsoPrime/IsoPrime100 instrument series
200002333	Ceramic insulator, 3 mm x 2 mm x 9 mm
200003554	Ceramic spacer, ion repeller
200001943	Compression spring
200001080	Connector 1 Filament to Flange
200002411	Connector 2 Filament to Flange
200002526	Connector Ion Source 'HP 1"' - Flange
200004022	Connector Ion Source 'HP 2"' - Flange
200003607	Connector Ion Source 'IR"' - Flange
200002778	Connector Ion Source 'Source' - Flange
200002607	Connector Ion source 'Trap' - Flange
200001201	Connector Ion Source 'ZP1 or ZP2"' - Flange
200000083	Defining shim support plate For use with the IsoPrime/IsoPrime100 instrument series
200000568	Half Plate
200000185	Inlet tube holder
200003794	Ion Box For use with the IsoPrime/IsoPrime100 instrument series
200000382	Ion exit slit plate, 5 mm
200004047	Ion source cooling wire, lower
200003520	Ion source cooling wire, upper
200000053	Ion source defining slit holder, source magnet mounting block For use with the IsoPrime/IsoPrime100 instrument series
200003243	Ion source magnet For the IsoPrime, IsoPrime100 and xION instrument series
200000371	Ion source magnet housing, off-set Offset housing magnet
200000487	Ion source magnet pole shoe For use with the IsoPrime/IsoPrime100 and xION instrument series
200003392	Ion Source Mounting Bracket for IsoPrime100
200004031	Ionisation Filament Compatible with IsoPrime, IsoPrime100 and xION instrument series
200002303	IsoPrime/IsoPrime100 source jig assembly
200002697	Lower Z plate
200002350	Nut, stainless steel, M2

Article No.	Article Description
200002153	Plate ion exit shield For use with the IsoPrime/IsoPrime100 instrument series
200000492	Plate, ion repeller
200003350	Rod, ceramic, 2.75 mm x 45 mm
200003698	Screw, stainless steel, CHD, SLT, M1.6 x 8 mm
200001012	Screw, stainless steel, CHD, SLT, M2 x 16 mm
200003533	Screw, stainless steel, CHD, SLT, M2 x 5 mm
200001779	Screw, stainless steel, CHD, SLT, M2 x 8 mm (10 pcs./package)
200003269	Screw, stainless steel, CSK, SLT, M1.6 x 3 mm
200002676	Screw, stainless steel, grub, SKT, M3 x 4 mm
200000886	Screw, stainless steel, M1.6 x 3 mm (10 pcs./package)
200001471	Shim defining slit, 5.08 x 0.254 mm Also see 200002946 for the 0.400 mm defining slit
200002946	Shim defining slit, 5.08 x 0.400 mm Also see 200001471 for the 0.254 mm defining slit
200001939	Sleeve, ceramic, 3.5 mm
200000546	Spacer, ceramic, 2.0 mm
200000782	Spacer, ceramic, 6.0 mm
200001979	Spacer, ceramic, 6.2 x 3.68 x 1.78 mm
200002646	Terminal washer
200003094	Trap Bracket For use with the IsoPrime/IsoPrime100 instrument series
200003484	Trap plate For use with the IsoPrime/IsoPrime100 instrument series
200001970	Upper Z plate
200003420	Washer, flat, M1.6 A4 SS
200000147	Washer, flat, M2
200002581	Washer, wavy, M3

Legacy instruments

IsoPrime100 IRMS

Vacuum System

Article No.	Article Description
200002011	Activated alumina for foreline trap, 200 g
200002954	Centring ring, stainless steel, NW25
200001242	Centring ring, viton, NW25
200001448	Foreline trap assembly
200001475	Ion source gas inlet connector, 1/4" VCR - 1/16" capillary For use with the IsoPrime/IsoPrime100 instrument series
200000353	Nupro valve maintenance kit
200003949	Oil mist filter for rotary pump exhaust
200002435	Penning Gauge Maintenance Kit For use with the IsoPrime/IsoPrime100 instrument series
200000826	Quad ring seal, viton, IsoPrime100 source & collector flange
200002565	Seal, gold, 1/4" VCR
200002865	Vacuum centering ring, NW10/16
200000341	Vacuum clamp ring, NW25
200000247	Vacuum hose clip
200001042	Vacuum hose, PVC, 25 mm

Auxiliaries

Article No.	Article Description
200002667	Fused silica capillary cutting tile

Legacy instruments



IsoPrime100 IRMS Dual Inlet

Successor: iso **DUAL INLET** (pageSeite 77)

Chemicals & Reagents

Article No.	Article Description
200003568	Dual Inlet Consumables Kit 1 years consumables kit for the Dual Inlet
200002566	Cracker 1 year spares kit
200000164	iso CARB PREP consumables kit for 1,000 analyses
200002529	iso AQUA PREP consumables kit (d180) for 1,000 analyses
200002260	iso AQUA PREP consumables kit (d180 and d2H) for 1,000 analyses
200000131	iso MULTI PREP consumables kit for 1,000 analyses
200001935	Sample Manifold 1 Years Spares Kit

Measurement Standards & Reference Materials

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA) and other external providers. Supply of these materials is dependent on the material being in stock at the provider. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

Article No.	Article Description
200003415	IRMS RM, IAEA 603, Calcite, d13C, d18O
200003470	IRMS RM, IAEA NBS18, Calcite, d13C, d18O
200003536	IRMS RM, IAEA LSVEC, lithium carbonate standard, d13C
200001310	IRMS RM, SLAP2 Water, d13H, d18O
200002812	IRMS RM, VSMOW2 Water, d2H, d18O
200000028	IRMS RM, GISP Water, d2H, d18O

Sampling & Sample Containers

Article No.	Article Description	Article No.	Article Description
200010686	MultiCarb Needle (Reduced Bore) For use with slow acid pump delivery routine	200003503	44 x 12 ml vial sample rack for GX-271 autosampler
200011710	Needle for carbonate and water analysis This needle is used for the following applications: <ul style="list-style-type: none"> iso FLOW: Used for carbonate, water and breath analysis Dual Inlet Carbonates: For use with fast acid delivery routine (i.e. MultiCarb without dry gas purge on FC/FH valve) MultiFlow: Used for carbonate and water analysis 	200002959	Septa, blue, 7/16"
		200001003	Septa, PCTFE, 100 pcs./package
		200003358	3.7 ml exetainer vial with lid, 50 x 12.5 mm, 10 pcs./package
		200003325	Vial, V-bottom, glass, 1.0 ml
200008196	Needle, AquaPrep		

Legacy instruments

IsoPrime100 IRMS Dual Inlet

Wear Parts

Article No.	Article Description
200010091	Acid delivery line sealing ferrule, peek
200007486	Carrier Assembly for Dual Inlet valves
200000100	Encapsulated tube seal, PTFE For manifold/cracker glassware
200004605	Ferrule, PTFE, 1/4" x 3/16"
200010932	Ferrule, PTFE, 5/16" x 3/16"
200010711	Ferrule, PTFE, 5/16" x 5/16"
200006656	Finger tight nut, peek
200008903	Microferrule, peek, 1/32"
200004228	O-ring, viton, 27.5 x 3 mm
200005069	Ring seal, gold, 1/4" x 0.5 mm
200001413	Ring seal, gold, 19.75 x 0.5 mm
200004946	Ring seal, gold, 36.0 x 0.5 mm For sealing AquaPrep/MultiCarb water trap cryo probe
200004766	Ring seal, gold, 9.9" x 0.5 mm
200007660	Valve diaphragm for Dual Inlet

Sample Delivery

Article No.	Article Description
200006137	Cracker tube assembly
200003600	Dual Inlet Acid Catch Pot Vial holder used for capturing acid vapour blown out of the needle
200004103	Dual Inlet needle fitting kit Uses reduced bore needle. Includes all ferrules, unions and tubing to replace needle assembly
200004513	Dual Inlet acid pump kit

Legacy instruments



MultiFlow

Successor: **iso FLOW** (page Seite 103)

Chemicals & Reagents

Article No.	Article Description
200003297	MultiFlow Bio Spares Kit 1 years spares kit for the MultiFlow Bio
200001877	MultiFlow Geo Spares Kit 1 years spares kit for the MultiFlow Geo

Measurement Standards & Reference Materials

Elementar are able to supply isotopic reference materials from the International Atomic Energy Agency (IAEA). Supply of these materials is dependent on the material being in stock at the IAEA. Supply is also dependent on receiving a signed end user declaration for the use of the materials. Primary reference materials should be used conservatively to generate secondary reference materials in the laboratory.

Article No.	Article Description
200000627	IAEA-CO8 Calcite IRMS standard
200003470	IAEA-NBS18 Calcite IRMS standard
200003536	IAEA-LSVEC Lithium carbonate IRMS standard
20000919	IAEA-303 Sodium Bicarbonate IRMS standard
200001310	IAEA-SLAP2 Water IRMS standard
200002812	IAEA-VSMOW2 Water IRMS standard

Sampling & Sample Containers

Article No.	Article Description
200003503	44 vial sample rack for GX-271 autosampler
200004170	Cap & septa for Labco vials
200011710	Needle for carbonate and water analysis This needle is used for the following applications: <ul style="list-style-type: none">• iso FLOW: Used for carbonate, water and breath analysis• Dual Inlet Carbonates: For use with fast acid delivery routine (i.e. MultiCarb without dry gas purge on FC/FH valve)• MultiFlow: Used for carbonate and water analysis
200009094	Needle guide
200015423	Needle holder
200010923	Needle, brazed, single entry hole, 90 mm
S200004249	Needle, brazed, single entry hole, 110 mm
200013426	Needle, single core for breath/air analysis
200003910	Septa. Grey VW-101
200009036	Vacuutainer vial, 10 ml
200003358	Vial with lid, 50 x 12.5 mm, 10 pcs./package

Legacy instruments

MultiFlow

Gas Separation & Adsorption Columns

Article No.	Article Description
200010789	Chrompak GC Column

Wear Parts

Article No.	Article Description
S6070773	Ferrule and ring, peek
ST1042997	Ferrule set, brass, 1/16"
ST1042998	Ferrule set, brass, 1/8"
ST1042630	Ferrule set, stainless steel, 1/8"
S6070737	Ferrule, graphite vespel, 1/16" x 0.3 mm
S6070736	Ferrule, graphite vespel, 1/16" x 0.8 mm
S6070735	Ferrule, graphite vespel, 1/16" x 1/16"
ST1040569	Ferrule, graphite vespel, 1/4" x 6 mm
ST1640333	Ferrule, PTFE, 1/16"
ST1017018	Ferrule, PTFE, 1/8" x 1/8"
S6070175	Ferrule, reducing, PTFE, 1/8" x 1/16"
S6070135	Ferrule, valco
ST1040559	Ferrule, wade, brass, 1/8"
S6070734	Sealing ring, vespel, 1/16" x 1/16"
ST1042242	Washer, glass filled PTFE, M5

Gas / Liquid Flow Handling

Article No.	Article Description
ST3602322	Capillary, fused silica, 220 um x 320 um
ST1042757	Capillary, fused silica, 75 um x 530 um
S6396072	Capillary, stainless steel, 1/16" x 0.030"
S6436007	Tube, peek, orange, 1/16" x 0.020"
S6436009	Tubing, peek, natural, 1/16" x 0.040"

Legacy instruments



TraceGas

Successor: iso **FLOW GHG** (pageSeite 105)

Chemicals & Reagents

Article No.	Article Description
200010744	80% Nickel / 20% Chromium wire, 0.125 mm diameter, 1 m
200008600	CO ₂ Absorbent for TraceGas
200001763	Copper wire, 0.125 mm diameter, 1 m
200005368	Magnesium perchlorate, 100 g
200013688	Sofnocat, 50 g
200002896	TraceGas N ₂ O/CO ₂ Spares Kit
200002013	TraceGas N ₂ O/CO ₂ /CH ₄ Spares Kit

Measurement Standards & Reference Materials

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Article No.	Article Description
200002484	IRMS RM, Potassium sulfate, d ¹⁵ N
200002058	IRMS RM, Sodium nitrate, d ¹⁵ N, d ¹⁸ O

Sampling & Sample Containers

Article No.	Article Description
200012947	Needle, brazed, single entry hole, 140 mm
200011368	Needle, denitrification analysis, laser welded, 4 entry holes, 115 mm
200014029	Needle, laser welded, 4 entry holes, 140 mm
200003832	Sample rack for 23.5 * 75 mm vials 1 rack holds 14 vials. Up to 5 racks can be used on the autosampler. Routinely used for "denitrification" analysis.
200001112	Sample rack for 28 * 95 mm vials 1 rack holds 14 vials. Up to 5 racks can be used on the autosampler.

Reaction Tubes & Accessories

Article No.	Article Description
200013815	TG furnace tube, ceramic, empty
200009230	Tube, glass, 6 mm x 200 mm
200008803	Tube, glass, 9 mm x 200 mm

Legacy instruments

TraceGas

Gas Separation & Adsorption Columns

Article No.	Article Description
200014302	LN ₂ Dewar for TraceGas
200001249	Nafion water separator assembly for LiquiFace and TraceGas
200013146	TraceGas cryotrap heater wire
200009230	Tube, glass, 6 mm x 200 mm
200008809	Tube, glass, 9 mm x 200 mm

Wear Parts

Article No.	Article Description
200014557	Brass nut, 1/16"
200002476	Ferrule set, PTFE, 1/4"
200014847	Ferrule set, stainless steel, 1/8"
200006031	Ferrule, graphite vespel, 1/16" x 0.8 mm
200014636	Ferrule, graphite, 3/8"
200015138	Ferrule, PTFE, 1/16"
200014894	Ferrule, valco
200001896	O-ring, viton, 3.0 x 1.0 mm
200013731	Sealing ring, vespel, 1/16" x 1/16"

Gas / Liquid Flow Handling

Article No.	Article Description
200008515	Tube, polyurethane, blue, 6 mm x 4 mm
200014233	Tubing, peek, natural, 1/16" x 0.025"

Sample Delivery

Article No.	Article Description
200006045	TraceGas sample flask, 100 ml

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