BERGHOF PRODUCTS + INSTRUMENTS GMBH

Product overview

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Personally at your service
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At your service all over the world
Our international dealer network

www.berghof-instruments.com/en/contact/
Berghof Products + Instruments GmbH

Product range

With over 50 years of experience, Berghof offers comprehensive expertise in the production of digestion systems used to prepare samples for subsequent elemental analysis. The needs of the users are at the core of our work. Intensive dialogue with our customers lets us develop innovative products with a variety of application options.

Microwave digestion systems

- Microwave digestion
- Acid purification

Reactor systems

- Pressure vessels
- Metal-free reactors
- High-pressure reactors
- Low-pressure reactors

Fields of applications

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<td>Medical Technology</td>
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<td>Environment &amp; Geology</td>
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<td>Waste Management</td>
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Field of application

Microwave digestion for sample preparation for heavy metal analysis using ICP-MS, ICP-OES and AAS. Designed for difficult to digest samples, digestion with volatile substances and high throughput.

Customer testimonial

“Thanks to the optical pressure monitoring of the speedwave XPERT, we are able to generate reproducible microwave digestions and therefore a maximum of reliability.”

Ulrike Morsch (lab technician at Eurofins Agroscience)
speedwave ENTRY

Field of application
Microwave digestion for sample preparation for simple samples in heavy metal analytics using ICP-MS, ICP-OES and AAS.

Product benefits
✓ Intuitive operation thanks to pre-installed reference applications
✓ Pressure-tightly sealed vessels for reproducible results
✓ User safety through integrated fume collection system and external exhaust unit
✓ Reproducibility through permanent optical monitoring of all temperatures
✓ Outstanding lifetime due to the use of high quality components and TFM-PTFE
✓ Opening and closing of the vessels without tools
distillacid BSB-939-IR

Field of application
Slow and gentle acid purification up to sub-ppb range. For the purification and recycling of hydrofluoric acid, hydrochloric acid and nitric acid.

| IR heating | up to 150 °C | up to 800 mL / batch |

Product benefits
- Cost-effective production of pure acids
- Low risk of contamination through the use of PTFE/PFA components
- Reduction of blank values
- Simple and safe operation
- Outstanding lifetime thanks to high-quality workmanship and durable components
- Automatic regulation and shutdown
Field of application
Pressure vessels for acid digestion, syntheses and material tests.

Product benefits
✓ Versatile use due to large variation in volumes
✓ Easy opening and closing thanks to the bayonet catch
✓ Above average lifetime

Customer testimonial
„The autoclaves have withstood all experiment conditions tested. Noteworthy are the easy handling and the high robustness of the reactors as well as their wide range of applications regarding different substance classes.“

Prof. Marcus Rose (TU Darmstadt, Chemical Technology II)
highpreactor DB

Field of application
Reactors free of metal contact for operating syntheses, material tests and acid digestions with large volumes.

Pressure measurement
Temperature measurement
Heating/cooling

Product benefits
 ✔ Suitable for the use of highly corrosive acids as the reactor is completely lined with PTFE
 ✔ Simultaneous measurement of temperature and pressure of the experiment
 ✔ Heating and cooling through double jacket and electric heating
 ✔ Easy opening and closing thanks to the tool-free locking system

up to 200 bar
up to 230 °C
300 mL to 1.880 mL
Field of application
High pressure reactors for synthetic chemistry, catalysis research and material testing.

Product benefits
✓ Individual adaptation thanks to extensive accessories
✓ High chemical resistance due to the use of PTFE, AISI 316Ti and Hastelloy® C-22
✓ Individual configurations for multiple applications
✓ Easy opening and closing through tested quick lock

Customer testimonial
„Ease of operation, robustness, pressure rating up to 200 bar, solvent compatibility together with the possibility to customize the complete setup for the PharmaFluidics process, are key benefits of the Berghof reactors. “

Kurt van Mol (Research Engineer, PharmaFluidics)
high preactor NR

Field of application
Low-pressure reactors for synthetic chemistry, catalysis research and material testing.

Product benefits
- Individual adaptation thanks to extensive accessories
- High chemical resistance due to the use of PTFE, AISI 316Ti and Hastelloy® C-22
- Individual configurations for multiple applications
- Easy opening and closing
- Easy up-scaling on pilot scale

Heating/cooling
PTFE lining
Stirring

| up to 25 bar | up to 300 °C | 1,4 L to 11,7 L |
Visit our website

www.berghof-instruments.com

Find out more about our microwave digestion systems, configure your reactor.

Or download the latest case studies and white papers.
Berghof Products + Instruments GmbH

Product brochures

Your local contact: