Discover the benefits of BUCHI’s laboratory equipment for the polymer and plastics industry. Speed-up your polymer extractions and simplify your testing tasks for process and quality control, research and development.
Our expertise for analyzing your polymer products
From extractables to additives and polymerization degree

What are the challenges in your laboratory routine? BUCHI supports you in your daily work by providing high quality and sharing application expertise and experience with you. Discover dedicated application Notes for polymer extraction and testing in your field of activity and simplify your laboratory activities.

Masterbatch
Reduce time from sampling to analysis significantly by using BUCHI Solutions. Control your production process online or at-line and ensure high quality of your masterbatches and the specific properties of tailor-made compounds.

Typical applications: control of polymerization process / crosslinked share / residuals from production process as fatty acid amides / quantification of additives

Rubber products and plastic parts
Simplify process and quality control by using automated solutions. Ensure high quality and dedicated properties of plastic parts, rubber products, industrial and consumer goods.

Typical applications: quantification of additives and total extractables / extraction of coatings

Foils and Packaging
Reach high recoveries and precision thanks to concerted workflows with low user intervention. Ensure high quality of your products and support the research and development of films, foils and packaging materials by reliable laboratory results.

Typical applications: determination of waxes, additives, total extractables / quantification of mineral oil contamination

Polymer waste
Get fast results for the quality control of waste polymers intended for recycling. Assess the risks of harmful compounds in waste polymers reliably with high recoveries and precision thanks to automated systems.

Typical applications: determination of residues, i.e. adhesives / determination of PCBs, flame retardants, phthalates

Find the Application Notes for your laboratory tasks and explore BUCHI’s Application Finder: www.buchi.com/application-finder
Solutions along your laboratory workflow

**Additives in MASTERBATCH:**
- E.g. Plasticizer in Polyamide

- **SpeedExtractor E-916**
- **Gravimetric**

**Extractables from RUBBER:**
- E.g. ISO 1407

- **SpeedExtractor E-916**
- **Rotavapor®**
- **Gravimetric**

**Quality of POLYMER PRODUCTS:**
- E.g. Coating in PE yarns

- **Extraction System B-811**
- **Evaporation is part of the process in the Extraction System B-811**
- **Gravimetric**

**Residues in POLYMER WASTE:**
- E.g. PBDE / PDD

- **Extraction System B-811**
- **GC-MS**

*With this product solution we are able to accelerate our day-to-day work significantly. The entire workflow became much more convenient and less-operator dependent* 
Laboratory Manager, QC Testing Laboratory, USA
### Complete your laboratory evaporation portfolio

**Complementary and related products**

<table>
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<tr>
<th>Pressurized Extraction</th>
<th>Classical Extraction</th>
<th>NIR Solutions™</th>
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<tr>
<td>The SpeedExtractor E-916 is your best solution for fast pressurized solvent extraction (PSE). Increase productivity by extracting up to six samples in parallel. Discover the concerted workflow of PSE with parallel evaporation using the Multivapor™ for unprecedented speed and throughput.</td>
<td>The Extraction System B-811 provides multiple extraction methods, including automated Soxhlet with high recovery rates and best precision.</td>
<td>Industry-proven solutions for warehouse, laboratory as well as in-, on- and at-line production give real-time control of your manufacturing process.</td>
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<th>Parallel Evaporation</th>
<th>Rotary Evaporation</th>
<th>Disposables</th>
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<td>The Multivapor™ P-6 / P-12 speeds up your sample evaporation for multiple samples. With its ease of use, the Multivapor is tailored to maximize efficiency.</td>
<td>Rotavapor® R-100 / R-300 offer convenient and efficient rotary evaporation from the market leader.</td>
<td>The extraction thimbles and filter papers are tailored to BUCHI’s extraction units. Trouble-free operation is guaranteed.</td>
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Voice of the Customer
Case studies

Analysis of final product
Producer: producer of masterbatch and color, Israel
Application: determination of additives and surfactants to assure characteristics and quality of masterbatch.
System: SpeedExtractor E-916 in combination with Multivapor™

Extraction of rubber
Customer: Producer of tires, Italy
Application: determination of extractables from rubber, according to ASTM D5774-95 for quality control of raw material.
System: Extraction System B-811 in combination with recirculating chiller

Quality control of packaging materials
Customer: Goglio, SpA, Producer of flexible packaging, rigid plastic accessories and packaging machines, Italy
Application: extraction of adsorbed fat in food packaging
System: SpeedExtractor E-916 in combination with Multivapor™

Explore more than 100 comprehensive case studies from all over the world on:
www.buchi.com/casestudies
Your most important benefits
Complementary and related products

Unmatched speed and throughput
- Speed-up your extraction with pressurized solvent extraction
- High sample throughput thanks to parallel extraction and concentration
- Immediate results for fast intervention with at-line or on-line NIR measurements

Easy-to-use
- No manual sample transfer is needed, because glassware for extraction and evaporation are compatible
- Combine Soxhlet extraction, rinsing and evaporation to dryness in one process with Extraction System B-811

Economical and ecological
- Cost savings for solvents by up to 70% with pressurized solvent extraction
- Replace your manual extraction glassware and use our automated Extraction System B-811 for high precision and reduced user intervention

Complete your portfolio

Melting Point
M-560 / M-565
Determination of melting point

Syncore® Analyst
Maximize multiple sample workup efficiency

Recirculating Chiller
F-305 / F-308 / F-314
The efficient and water saving way of cooling

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