



Technical & Application Services –
Household, Industrial & Institutional Cleaning

Lab & Innovation Centre

We develop innovative and market-oriented formulations, carry out product tests and train personnel in supplier- and customer-specific workshops.

- › Developing tailored solutions to cater for the needs of our customers (EU)
- › Trend analysis for new formulation concepts
- › Creating innovative, market-ready formulations with products from our wide-ranging product portfolio
- › Development of various cleaning formulations in homecare and I&I, testing is possible for the below mentioned parameters
- › Evaluation of key parameters such as cleaning performance, foam generation, wetting, stress-cracking
- › Screening new raw materials from our partners
- › Conducting comparative studies
- › Internal, customer and supplier technical workshops and trainings in Biesterfeld-owned facilities
- › Cooperation with external partners (microbiological test acc. to ISO 11930)
- › Wide scope of apparatuses for formulation development and evaluation

The premises contain also a conference room and a modern presentation and meeting area. The lab work is carried out in the Hamburg based Lab and Innovation Centre as well as in the Cleaning Lab in Istanbul.

For more information please contact

application-laboratories@biesterfeld.com

Biesterfeld

Lab and Innovation Centre



Testing



Formulation



Training & Support



Test methods

Method	Equipment	Comment
Mixing	IKA Ultraturrax T25	Homogenisation of emulsions S 25 N - 18 G dispersing tool, volumes 10 - 1500 ml suitable for solvents
	IKA Ultraturrax T50	S 50 N - G 45 G dispersing tool, volumes 0.5 - 20 liters suitable for solvents
	Thinky Speedmixer	Planetary centrifugal mixer for highly efficient and fast mixing, sample volume: 150ml
Viscosity	Brookfield DV-1 viscosimeter RV-Spindle set	Relative measurements (no absolute measurements possible due to variable test specimen)
	Brookfield DV-1 viscosimeter T-Spindle Set & SSA (Small Sample Adapter)	For limited sample volume
Stability tests	Hettich EBA280 centrifuge	Centrifugation of formulations Quickstability testing
	Long-term stability evaluation	3 months at room temperature, 40°C, 4°C
	Challenge Test (ISO 11930)	External test institute for the evaluation of bacterial and yeast resistance in final formulations
	Phoenix Instrument RS-LS10 digital linear and orbital shaker	segregation assessment of powdered or granulated products in a formulation
Light Microscopy	Kern OBD 137 (camera and software)	Evaluation of particle sizes and oil/water droplet distribution in emulsions
Wetting Ability	Draves Test	Conducted with greige cotton, weight and hook to evaluate the wetting ability of cleaning formulations
Foam Tests	Shaking test in cylinder	Shaking for 10s in a 100ml cylinder, foam break down evaluation
Scrub Test	TQC Device	Qualitative evaluation of cleaning formulations with standardized dirt Acc. to IKW Recommendation for the Quality Assessment of the Product Performance of All-Purpose Cleaners 2014
Stress Cracking	standard test procedure	Cracking corrosion test with small plastic sticks made of different materials, based on German standard DIN 53449-3
Solid forms	Manual tablet press LFA Machines Oxford LTD	Single tablet manufacturing machine; tablet diameter max. 10mm; tablet thickness 2-6mm; max. pressure 3.1kN

Contact

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Lab and Innovation Centre

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Directions

The Lab and Innovation Centre is easy to reach. Whether by car (via the A7, A1 or A24), by public transport (bus 180, Rondenborg stop) or by taxi.



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