



Technical & Application Services – HealthCare Pharma

## **Biesterfeld Laboratory Services**

The Lab and Innovation Centre is where we work on the products and solutions of tomorrow.

- > Development of customer-specific solutions
- Creation of innovative, marketable formulations with our broad portfolio of raw materials
- Product screening of new materials from our suppliers
- Comparative tests







#### Lab & Innovation Centre

Covering a total area of 800 m² our Lab and Innovation Centre is used for application-related laboratory activities. These include the development of innovative and market-oriented formulations, carrying out of product tests and customer-specific project work.

- Developing tailored solutions to cater for the needs of our customers
- Trend analysis for new formulations
- Creating innovative formulations with products from our wide-ranging product portfolio
- Broad range of expertise: Gels, Ointments, Emulsions, Liquids, Sticks, Solid forms (tablets, powders)
- Screening new raw materials from our partners
- Conducting comparative studies
- Internal, customer and supplier technical workshops and trainings in Biesterfeld-owned facilities
- > Calculation of natural origin content NOC (acc. to ISO 16128)
- Cooperation with external partners (microbiological test acc. to ISO 11930)
- Wide scope of apparatures for formulation development and evaluation

The premises also contain a conference room and a modern presentation and meeting area.

For more information please contact

application-laboratories@biesterfeld.com

# Methods & Equipment

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	Relative measurements (no absolute measurements possible due to variable test specimen)
	RV-Spindle set	
	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
Sensory evaluation	N/A	Conducted by lab personnel and if needed by further colleagues as blind study
Filling	Manual filling machine Kimtem A03 Pro	Filling of different packaging equipment and size
	Manual welding machine	For all types of plastic tubes (PE/PP) Height and welding time adjustable
Solid forms	Manual tablet press LFS Machines Oxford LTD	Single tablet manufacturing machine; tablet diameter max. 10mm; tablet thickness 2-6mm; max. pressure 3.1kN

### Contact

Dr. Lisa Kühne

Laboratory Manager

mobile +49 170 2295581 l.kuehne@biesterfeld.com

#### **Lab and Innovation Centre**

Lab and Innovation Centre Schnackenburgallee 41A 22525 Hamburg

#### **Directions**

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





Published by:

**Biesterfeld SE** 

Ferdinandstrasse 41 20095 Hamburg www.biesterfeld.com