



## **INNOVATION CENTER**

COATINGS / CONSTRUCTION / ADHESIVES

**BCD** 

# INNOVATION CENTER

## COATINGS / CONSTRUCTION / ADHESIVES

Innovative, modern, user-oriented and variable laboratory services are the requirement these days for coping with the rapid transition in research, development and application technology. The Innovation Center of BCD Chemie in Duisburg satisfies this need. A team of experts offers qualified and foresighted support with this, from the formulation of recipes in the laboratory and optimisation to the scale-up to market-ready products.

Our team carries out numerous different tests on coatings and adhesives, as well as on powder materials for the construction chemistry sector and liquid formulations, in accordance with current standards and in line with test regulations, and will advise you on new raw materials from the BCD product portfolio in order to optimise your formulas in terms of both quality and cost.

BCD Chemie offers these physical and application-specific tests, as well as characterisation of raw materials and formulations and the optimisation of recipes as a service.

Would you like to use the laboratory to support your own development? Talk to your contact at BCD Chemie. They will pass you on to the responsible technicians.

Or get in touch with one of our experienced technicians directly. The contact details can be found on the last page.



## GENERAL CHARACTERISATIONS

- Determination of density (pycnometer))
- pH measurement
- Determination of viscosity (Brookfield)
- Rheological profile (rheometer)
- Storage stability and sedimentation behaviour
- Microscopic analysis
- Non-volatile matter



# COATINGS

## DEVELOPMENT

- Development, optimisation and testing of recipes/formulas
- Raw material testing
- Comparative studies



## VARNISH PROPERTIES

- Flow time (DIN, ISO)
- Granularity (grindometer)
- Drain-off characteristics
- Flow
- Drying time
- Foaming tendency
- Spattering tendency
- Rheological profile

## APPLICATION

- Spraying, spatula, roller or brush
- Substrates: wood, metal, plastic

## TESTING OF PAINT FILMS

- Gloss (20°, 60° and 85°)
- Colour (Lab value)
- Film thickness (wet and dry film))
- Film hardness (König, Shore A, Shore D, Buchholz, hardness testing rod ISO 1518)
- Adhesion (cross-cut)
- Impact test ISO 6272-2
- Wet-scrub resistance
- Mandrel bending test
- Abrasion resistance
- Salt spray test/freeze-thaw test
- Opacity (contrast chart)
- Resistance (chemical and mechanical)





# CONSTRUCTION

## DEVELOPMENT

- Development, optimisation and testing of recipes/formulas
- Raw material testing



## TESTS ON CEMENT/GYPSUM SYSTEMS

- Mortar consistency (flow spread)
- Mortar setting
- Open time
- Workability
- Stability
- Correctability
- Adhesion

## TEST METHODS

- Water absorption (Karsten tube, immersion of test specimens)
- Water vapour diffusion
- Water-whitening of coatings

Experts in  
**Chemistry**



# ADHESIVES

## DEVELOPMENT

- Development, optimisation and testing of recipes/formulas
- Raw material testing

## ADHESIVE PROPERTIES

- Drain-off characteristics
- Wetting
- Hardness (e.g., according to Shore A, D)
- Storage stability
- Open time
- Rheological profile/viscosity
- Stability
- Foaming tendency
- Temperature resistance
- Workability
- Water resistance



## BONDING PROPERTIES

- Pull-off test with fracture pattern assessment (adhesion, cohesion and adherend failure)
- Further adhesion tests
- Tack
- Peel adhesion and shear resistance

# BCD CHEMIE - ABOUT US

For decades, BCD Chemie has been concentrating on the marketing and distribution of industrial and specialty chemicals across Europe, and it is one of the leading suppliers in this segment. As a link between manufacturers of high-quality chemical raw materials and users from numerous industries, we supply B2B sales solutions for a wide range of industries and applications. Profound market knowledge, competent advice on products and applications, and comprehensive expertise in both chemical-technical and market-analytical contexts form the basis of our philosophy of modern chemical distribution.



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