## INNOVATION & APPLICATION CENTER

## **CASE & CONSTRUCTION**

#### **New Dimensions for Innovation**

We are excited to introduce our application laboratory – a state-of-the-art space for innovative developments and high-quality testing in the fields of paints, coatings, adhesives, sealants, elastomers, and surface pretreatment. Equipped with technology that goes beyond industry standards, we are setting new benchmarks in raw material testing and product development. Our laboratory not only offers cuttingedge technologies but also a versatile testing environment specifically designed to meet the individual requirements of our customers and suppliers. Here, precision and innovation come together: We combine technical expertise with the most advanced equipment to deliver tailored solutions and reliable test results - for both BCD Chemie and our partners.

#### We offer our partners

- Technical Consulting
- Recipe Optimisation
- > Formulation Development > Raw Material Screening > Process Optimisation
- Comparative Testing

Raw Material Analysis





# PRODUCT PORTFOLIO BATTERIES



#### **BCD CHEMIE GMBH**

Schellerdamm 16 21079 Hamburg

Tel.: +49 40 77173 0 info@bcd-chemie.de www.bcd-chemie.de



# **BATTERIES - OUR PORTFOLIO**

#### **ELECTRODES**

>	Antifoams	Antifoams for water-based slurries that have been specifically developed for usage in electrode coatings.
>	Rheology Additives	Synthetic phyllosilicate-based additive for water-based slurries.
>	Wetting and Dispersing Additives	Improves dispersibility and increases the solid content. Specially formulated and developed for the ingredients in electrode slurries and for use in electrode coatings.
>	Wetting Agents	Smoother levelling and better substrate wetting. Suitable for use in electrode coatings.
>	Adhesion Promotor	Synthetic phyllosilicate-based additive for water-based slurries.
>	CMC	Ultra-pure CMC, which acts as a rheology additive, binder and adhesion promoter in electrode coatings and was specifically developed for this application.
>	Carbon Blacks	Conductive carbon blacks for the wet and dry process in all battery types.
>	Carbon Nanotubes	Hybrid carbon nanotubes for excellent conductivity and mechanical properties of the electrodes.
>	Carbon Nanostructures	Cross-linked carbon nanotubes for the cycle performance and conductivity of silicone-containing anodes as well as lower stress on the cathodes.
>	NMP substitute	Solvent with similar dissolving properties to NMP and lower toxicological profile.
>	Fumed Alumina	Ultra-fine powder for the surface coating of the active material of cathodes (CAM) in the dry process. Increases the life-cycle and safety of battery cells.

#### **SEPARATORS**

Antifoams	Antifoams for water-based slurries suitable for use in separator coatings.
> Rheology Additives	Improves dispersibility and increases the solid content. Specially adapted to the ingredients in separator coatings.
<ul><li>Wetting and Dispersing Additives</li></ul>	Smoother levelling and better substrate wetting. Suitable for use in separator coatings.
> Fumed Alumina	Increases the durability of separator coatings.
Binders	Water-based polyacrylate dispersion for ceramic separator coatings.
<b>&gt;</b> CMC	Used in separator coatings as a rheology additive, binder and adhesion promoter.

## **ELECTROLYTES**

> Furned Silica Rheology control in lead-acid batteries.

#### THERMAL MANAGEMENT

Nanoporous silica for thermal insulation. Can be used among other things in fabrics, hollow chambers, adhesives and paints.

## **CLEANING / DEGREASING**

Antifoams To prevent foam in process and waste water.
 Water-based Cleaners Application-specific cleaners for spray and immersion cleaning.
 Solvent-based Cleaners Cleaners that are primarily used as degreasers.
 Conversion Coatings Special mixtures for the creation of temporary corrosion protection on various metals.

#### RECYCLING

> Solvent Concept Take-back and recycling of used solvents.

