

DELIVERY PROGRAMME

PRODUCTS FOR THE MANUFACTURING OF BATTERIES



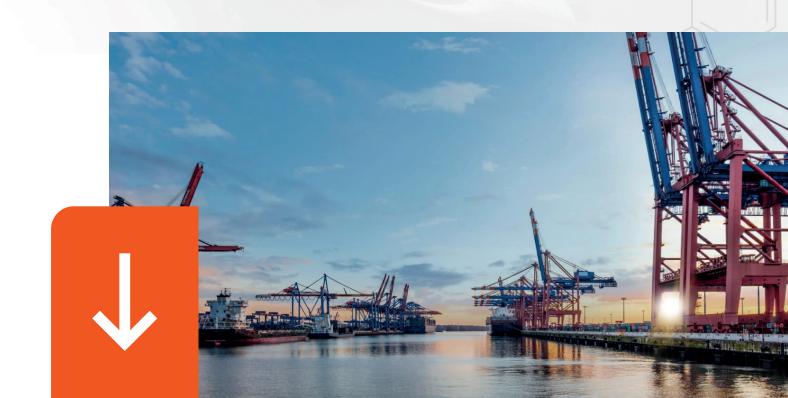
BCD CHEMIE ABOUT US

For decades, BCD Chemie has focused on the pan-European marketing and distribution of industrial and specialty chemicals and is one of the leading suppliers in this segment.

As a link between the manufacturers of high-quality chemical raw materials and users from many industries, we deliver B2B sales solutions for a wide range of sectors and applications.

Profound market knowledge, competent product, and application advice as well as comprehensive expertise in chemical-technical and market-analytical contexts form the basis of our philosophy of modern chemical distribution.

For the manufacturing of batteries, we supply additives that improve the properties of electrodes and separators. To produce battery housings and the assembly of batteries, BCD Chemie distributes cleaners for metal surfaces and chromefree conversion coatings. For coatings and bonding of battery housings, we offer various binders and additives.



LI-ION BATTERIES

ELECTRODES

Wetting and dispersing agents:

Increasing the solid content of conductive carbon structures or stability of slurries of pastes, CNTs, carbon black and graphite slurries and minimising and preventing sedimentation

Layered silicates:

Synergistic effect with CMC. The combination of both products results in a higher gel strength. Layer silicates additionally act as adhesion promoters



SEPARATOR (CERAMIC COATING)

PRODUCT	DESCRIPTION
Surface additives	Reduction of the surface tension of coatings, better and more uniform substrate wetting
Wetting and dispersing agents	Increasing the solid content of the slurries while maintaining the viscosity; stabilisation of the particles and prevention of sedimentation
Antifoam	Mineral oil, silicone, or polymer antifoams to avoid foam during the production and application of the coating
Binder	Polyacrylates as binder for coatings
Amorphous fumed silica	Inorganic particles to improve the properties in the production of separators



LEAD BATTERY

ELECTROLYTE

Amorphous fumed silica and alumina oxide:

Increasing the service life and the number of possible charging cycles in lead-gel batteries by increasing the acid absorption capacity. Better prevention of short circuits of the sulphuric acid electrolyte; minimisation of corrosion.



BATTERY HOUSING

SURFACE TREATMENT/ ALUMINIUM CASE

- Water-based sprayable immersion cleaner
- Water-based phosphate builder
- Water-based salt-free builder with corrosion protection
- Water-based spray surfactants partially suitable for higher pressures
- Chrome-free conversion coating for spraying or dipping processes

DEGREASING

- High performance modified alcohol solvent with high flash point and very good grease and oil dissolving capacity
- Chlorinated hydrocarbons in safety containers

ADHESIVES AND SEALANTS

Acrylate resin:

Polyacrylates as a base for the formulation of adhesives

Polybutadiene:

Saponification-resistant highly flexible polybutadiene for potting compounds and sealants

Silanes:

Adhesion promoter between metal and adhesive or sealant

COATINGS

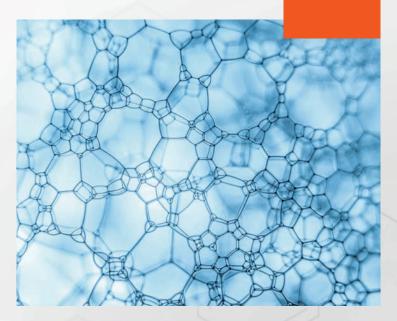
PRODUCT	DESCRIPTION
Acrylate resin	Polyacrylates and reactive resins as binders for battery housing coatings
Saturated polyester	Saturated polyester resins for the coating of metallic battery housings
Silanes	Adhesion promoter between metal and coating

MISCELLANEOUS

PROCESS AIDS

Antifoam:

Mineral oil, silicone or polymer defoamers to prevent foam in process water, waste water and waste water treatment



SERVICE - BLENDSERV®

BLENDSERV® is the programme of BCD Chemie for special mixtures and contract filling. Here we provide you with targeted support in production-related routines or in the event of bottlenecks in production.

The comprehensive BLENDSERV® service programme helps you to save costs, increase efficiency and improve safety and timing.

PLANT CONCEPTS

- Production of solid-liquid dispersions (slurry) and solutions as well as liquid-liquid mixtures or emulsions.
- Tank volumes from 500 l up to 24 m³. Dissolver disc, jet stirrer, dispermix and Conti TDS inline dispersers are available as agitators.
 Motor power from 18 to 90 kW.
- Cooling / heating in the range from 15 °C up to 90 °C, viscosity up to 10,000 mPa*s.





BCD CHEMIE GMBH

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TECHNICAL SUPPORT

For more detailed information on the products and their benefits, please contact our technical experts:

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Electrode and separator production, electrolytes, coatings, bonding and processing aids:

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