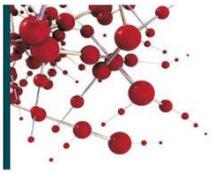


| PRODUCT LIST





WATER TREATMENT

■ COAGULANTS

Their main application is to clarify treated water, reduce sludge volume and effectively dehydrate sludge.

Mineral coagulants based on different metal salts, which optimize water purification for each specific problem. We adjust the treatment and formulation to achieve maximum purification performance in each case.

DEPURFER RANGE

Coagulants made from simple Iron salts.

- **DEPURFER 00**
Ferrous chloride for discoloration of industrial wastes and heavy metal chelating agent.
- **DEPURFER 100**
Ferric chloride to eliminate urban wastewater turbidity and reduce organic matter, phosphorus and nitrogen
- **DEPURFER SF**
Ferric sulfate to eliminate color in a wide pH range.

DEPURAL RANGE

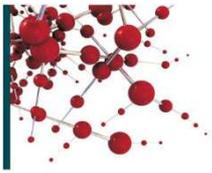
Coagulants made from combinations of simple or pre-polymerized aluminum salts.

- **BD DEPURAL**
Aluminum chlorohydrate with different Al₂O₃ concentrations (10, 14, 18) for high coagulation speed at low temperature and high pH.
- **BD DEPURAL HB**
High-alkalinity aluminum chlorohydrate, efficient for water clarification and purification.
- **BD DEPURAL S**
Aluminum sulfate. Turbidity elimination and odor reduction in wastewaters.

DEPURGREEN RANGE

Eco-friendly organic coagulants, as a high-performance, more sustainable alternative to traditional metal salts. Modified tannin-based natural polymers. Tannins are natural substances that may be modified to provide them with cationic charge.

They are biodegradable and benefit the environment by increasing the subsequent value generated sludge.



BD SODAL

Sodium aluminate. Effectively removes phosphorus in low-alkalinity waters. It contributes to maintain filamentous bacteria under control.

BD HM 15

Trisodium salt of trimercapto-S-triazine. Its main application is for removing heavy metals such as mercury.

BD REDUPHOS

Magnesium chloride and hydroxide in solution for phosphorus precipitation in urban wastewater treatment plants. It may be recovered it as struvite.

Specific formulations

Coagulants based on combinations of iron and aluminum salts and organic coagulants formulated for specific problems.

FLOCCULANTS

Organic chemical products, natural or synthetic, known as Polyelectrolytes. They are high molecular weight very long chain compounds. They are used to increase the size of primary flocs (micro-flocs) thus enhancing decantation. They adhere to coagulated colloidal particles, acting as a bond between them.

BD POLIFLOC CAP

Range of solid cationic-synthetic flocculants with different charges, specially recommended for sludge dehydration.

BD POLIFLOC CAL

Liquid cationic flocculant, dispersion or emulsion. Wide range with different charges and viscosities, suitable for multiple problems and applications.

BD POLIFLOC ANP

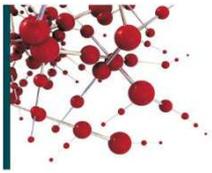
Range of solid anionic synthetic flocculants with different charges, specially recommended for suspended particles removal and water clarification in industrial decantation processes.

BD POLIFLOC ANL

Liquid anionic flocculant tailored to the needs of each customer for specific applications.

BD POLIFLOC NI

Non-ionic polyacrylamide for suspended particles removal. Effective within a wide pH range (6 – 14). rango de pH (6 - 14). Highly efficient in combination with other common water-treatment products such as: aluminum sulfate, aluminum polychloride, ferric chloride.



BD POLIFLOC EX

Acrylamide-free product that complies with the requirements of the UNE regulation and the regulations concerning products used in the treatment of water for human consumption. Due to its high molecular weight, this product can successfully substitute traditional polyacrylamides. It promotes quick sludge sedimentation.

BD POLIFLOC MIDO

Product of natural origin. Acrylamide-free product that complies with the requirements of the UNE regulation and the regulations concerning products used for water treatment for human consumption. Cationic modified potato starch for use in water purification processes.

Ph REGULATORS

PH MINUS RANGE

PH lowering agents with formulations in different concentrations and delivery formats. They comply with the regulations for the treatment of drinking water for membrane cleaning in water purification processes in desalination and drinking water treatment plants.

- BD PH-Minus S

Sulfuric acid for optimal adjustment in physical, chemical and biological purifying plants.

- BD PH-Minus C

Hydrochloric acid; pH adjustment in the purifying plant, before discharge into the receiving environment, and for metal precipitation.

PH PLUS RANGE

Alkalinizing agents

- BD PH plus

Sodium hydroxide formulations from 10 to 50% concentration. The most frequently used pH increasing agent in water purifying processes. It complies with the regulations for the treatment of drinking water.

DEPURCAL

High purity calcium hydroxide in bags; used to increase the pH of treated water and to improve sludge dewatering. Ideal to reduce sulfates and phosphates in residual water and to reduce effluent conductivity.

GELCAL 35

High purity *calcium hydroxide* in 35% liquid suspension. It prevents problems concerning operator health and safety in relation to handling of the powdered product.



■ ANTIFOAMING

BD ANTISKUM

Range of antifoaming and foam-control agents with different bases and at several concentrations. To prevent and fight the formation of foam, which produces failures in water treatment equipments and reduces treatment efficiency.

- **Silicone basis** (polysiloxane emulsion)
- **Polyalcoyester mixture** (propoxylated ethoxylated alcohols)
- **Oil basis** (mineral)
- **Fatty acids and fatty alcohols derivatives** (plant derivatives)

■ DISINFECTANTS AND OXIDIZING AGENTS

BD HIPOWAT

Sodium hypochlorite. The most frequently used disinfectant and the one with the best value for money. Authorized for the treatment of drinking water.

- BD HIPOWAT HG

High-concentration hypochlorite 180 gr/l active chloride.

- BD HIPOWAT VD

Intermediate-concentration sodium hypochlorite 150 gr/l. Ideal for bulk deliveries in large facilities.

- BD HIPOWAT LG-15,

High stability hypochlorite 150g/l. In different packages, suitable for smaller facilities.

- BD HIPOWAT LG-5,

Hypochlorite 55 g/l

CHLORINE DIOXIDE

The *stabilized dioxid e* is an ideal for disinfection, preventing the formation of organochlorides. Also an optimal disinfectant for cooling towers; lower corrosion with lower doses.

BD DEPURKLIR 25

Sodium Chlorite 25%. Chlorine dioxide precursor for disinfection in drinking water treatment. It complies with all the regulations concerning drinking water consumption.

CALCIUM HYPOCHLORITE

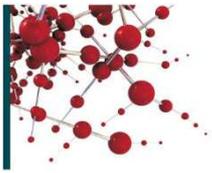
Recommended for disinfection of ponds and wells, where investing in dosing equipments is not possible.

BD OXIWAT

Hydrogen peroxide. Powerful oxidizing agent used in Fenton reaction processes in waters with high non-biodegradable organic matter load.

BD OXITAP

Potassium permanganate. This product inhibits the growth of algae and microorganisms, destroys organic matter and fights unpleasant odor and taste. Oxidation and removal of iron. Reduction of trihalomethanes and other organic compounds.



REDUCING AGENTS AND CORROSION INHIBITORS

BD REDUCLOR

Sodium bisulfite is a reducing agent. It is used to remove dissolved oxygen, as a technology to prevent corrosion. Applied in water purification technologies based on reverse osmosis and ultrafiltration membranes.

BARQUEST RANGE

We offer preparation and manufacturing of different solutions of a variety of special raw materials used as dispersing agents and corrosion inhibitors in different cleaning and maintenance processes in water facilities.

- BARQUEST ATMP

Amino trimethylene phosphonic acid. Excellent chelating ability, low threshold inhibition and lattice distortion process, which prevent scale formation in water systems, in particular calcium carbonate scales.

- BARQUEST DTPMPA

Diethylenetriamine Penta (*methylene phosphonic acid*). Soluble in acid solution. Non-toxic, good temperature resistance.

- BARQUEST HEDP

Ethylidene diphosphonic acid. High efficiency and resistance to alkalinity and acidity and to chlorine oxidation.

- BARQUEST PBTC

Butanetricarboxylic acid. Low phosphorus content, resistant to chlorine oxidation and good compatibility with mixtures.

- BARQUEST PMA

Polymaleic acid. High thermal stability. Widely used in desalination and boiler systems. Very effective with zinc salts.

- BARQUEST DEHA

Diethylhydroxylamine. It is a volatile metal-passivating oxygen scavenger. In this application it is a direct substitute for hydrazine. Hydrazine is a carcinogenic substance, incorporated into the ECHA Candidate List of SVHC substances in 2001, whose use must be discontinued for safety reasons.

MINERALIZATION

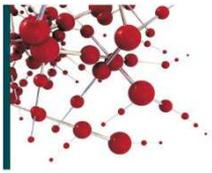
BD REMICAL

High purity *calcium carbonate*. Because of its composition and characteristics, it is ideal for water mineralization processes in water purification with reverse osmosis systems. Certified for drinking water consumption.

DECALCIFICATION

DEPURSAL RANGE

High-purity *sodium chloride*, used in different applications such as regeneration of ion exchange resins in decalcification equipments, mineralization and saline electrolysis.



■ **NUTRIENTS FOR BIOLOGICAL SYSTEMS**

Organic easily-biodegradable products (solid and liquid) tailored to the needs of biological treatment systems, which can be used as substrate or source of carbon, nitrogen and phosphorus, with the aim of balancing nutrients in biological reactors with specific requirements. Our formulations include products that combine these nutrients with a coagulant effect.

BD BIOFOOD N

Nitrogen-based product range

BD BIOFOOD F

Phosphorus-based product range

BD BIOFOOD M

Methanol. Necessary to reduce nitrate to free nitrogen in denitrification processes.

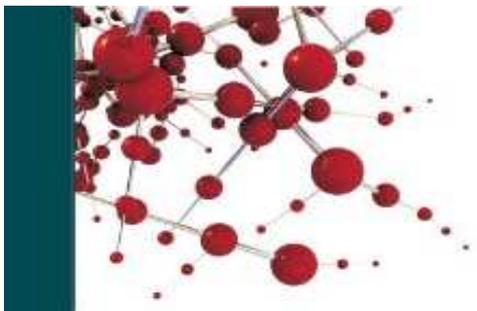
BD BLEENPHOS 35

35% phosphoric acid solution with aluminum salts.

■ **ADSORBENTS**

BD CARBON

Activated carbon in different formats: powder, granulated and pellets; used to remove pollutants due to its high adsorption capacity. . It eliminates odor and color through static filters or directly into reactors. Different porosity structures and adsorption indexes, depending on the involved industry and the type of water to be treated.



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