



MODERN CLEANING AGENTS, CLEANING TECHNOLOGY AND PROTECTIVE AGENTS

Through internal development department and in cooperation with University - Bielefeld we create a modern, highly effective and to humans, animals and environment - friendly cleaners, cleaning technology and preservatives all types of surfaces and agents for protection during welding.

The exit points of this work of science is the development on the requirements of customers and the market for tomorrow - for future projects in the area of protecting of the environment and "Surface Technology". In recent years the whole market view focused on reducing VOC (volatility organic compounds) – free water-based cleaners and the development of alternative cleaning media - even with a specially cultured microorganisms to improve performance.

VOC - Order means the reduction of solvents in cleaning:

VOC - Volatile Organic Compounds means (volatile organic compounds). These are polluting the environment and also harm human health. The currently effective solvent regulation (Germany: 31. BImSchV, Germany: [31st Federal Immission Control Regulation], Austria: VOC-Anlagen-Verordnung [VOC Plant Regulation] – VAV) aims at considerably reducing the use of solvents and VOC emissions into the environment, thereby protecting human health. This solvent regulation concerns e.g. activities such as surface cleaning, varnishing and coating, and surface cleaning.

Using BIO-CHEM water based products, organic solvents can be - in many cases, completely replaced. Additionally, many of these, very volatile solvents, such as, for example acetone or ethyl-acetate, may be replaced with BIO-CHEM special cleaning agents and thereby meeting the expectations of the regulation.

Because of the awareness and environmental responsibility, the company BIO-CHEM GmbH founded, already in 1996, the environment department, which works on the proposals of the global ruling norms DIN ISO 14001 (according to Lloyd's Register Qualitative Assurance). As an environmentally oriented company BIO CHEM GmbH does not only lay the greatest weight on the value of the products but also to protect the environment.

For any kind of contamination we can offer you the perfect cleaning method!

As a rule, cleaning products are divided into water-based cleaners and solvents. Depending on their applications, the aqueous cleaning agents are adjusted to neutral, alkaline or acidic. There is however some overlapping in the fields of application of the neutral, alkaline and acidic cleaning agents.

Cleaning in the foodstuffs industry with BIO-CHEM products:

In Germany, cleaning in the foodstuffs industry is subject to the LFGB [Foodstuffs, Consumer Goods and Feedstuff Law]. According to this article solvents are consumer goods. It is prohibited to put consumer goods in circulation that contain substances that may pass over to foodstuffs or their surfaces. The aqueous BIO-CHEM cleaners are completely miscible with water, and because of their residue-free - so they are suitable for applications in the foodstuffs industry according to the regulation.



Sales program of BIO-CHEM products – according to following areas:

Cleaning:

- **Special cleaners for all applications** (industrial plants, workshops, water systems, and domestic or other households, personal hygiene, disinfectants, removal of stubborn stains, degreasing, ...);

Cleaning techniques and systems:

- **Special cleaning technology with dedicated cleaning equipment** (cleaning and degreasing with BIO-CIRCLE technique, cleaning device for piping systems, devices for cleaning with ultra sound, machines for cleaning of smaller items with hot water and pressure, removal or cleaning welds - by electrolysis, cleaning using "multi-frequented" devices ...);

Surfaces protection:

- **Special protective agents** (oils and waxes for conservation, protective, separating and high temperature pastes, based on zinc, copper, aluminum (also in the form of aerosol - spray), and protective, separating non-metallic and other specialty pastes, ...);

Lubrication:

- **Special greases and oils** (for the food and pharmaceutical industries, as well as for all other industrial plants, such as: automotive – vehicle industry, construction, agriculture, plastic industry – injection molding, paper and metal processing industry, ...);

Welding:

- **Special protection and cleaning agents** (various species, environment-friendly and purpose-protective liquids separation oils, greases and pastes, ...);

Spray systems:

- **Aerosols – sprays of all types** (sprays for various applications - at home and in industry, for the automotive and machinery program, aerosols filled with air or special propellants, aerosol filling on the order - also for the application fields of cosmetics, pharmacy, food, chemistry, etc.. , as well as filling of fire or explosive dangerous substances, ...);

Season articles:

- **Special agents for seasonal use** (special cleaner for car windshields of glass - down to minus 60°C, agents for rapid melting of the ice from the walking surfaces - down to minus 50°C, agents for removing of algae, fungus, mold, ... and also protective equipment for fabric surfaces ect.).

**For every other information you may need please call the telephone number: ++386 (0)2 / 228 0851
we will be gladly available!**

MA-ECO CHEM d.o.o.
Your problems, our challenge!