



RBS Detergents for Precision Manufacturing

Precision manufacturing involves preparing surfaces for bonding, coating or exposure to a special processing and environment that are highly sensitive to residues. Key concerns in selecting detergent for precision manufacturing are efficiency in cleaning and non-use of volatile solvents, strong acids and other hazardous chemicals.

RBS aqueous detergents perform as well as or better than solvent cleaning agents in removing residues without the harmful environmental side effects. RBS cleaning solutions are suitable for various high performance cleaning processes in precision manufacturing of glass, plastics, metal parts, electronics, ceramics, optics, medical devices ...

- **Electronic & semiconductors**
- **Optic & glass**
- **Metal working**
- **Plastics**



Chemical Products s.a. is a Belgian leading manufacturer of specialized cleaning agents for use in high tech industries, production, laboratories and medical technologies. The company constantly works in developing high performance cleaning solutions that fulfil customer's needs, respect the environment and meet the requirement of the most recent regulations at the European and International level.

Performance in High-Tech processes

Among high tech applications for RBS aqueous cleaning agents:

- Anodized parts, electro-optics, optical sensors and detectors, circuit boards, assemblies, screens,
- Hard disk drives, semiconductors, quartz resonators,
- Silicon wafer (electronic & photovoltaic), Silicon wafer polishing frames, ceramic & glass insulators, quartz ingots for optical fibers,
- Mold dies & cavities, semiconductors packaging in glass, quartz, porcelain and synthetic matter, plastic injection mold, computers components, parts made of porcelain, stainless steel, ceramic, plastic and rubber.
- Parts and components made of aluminum and soft metals

Removal of organic residues such as processing oils, silicon oils, chemicals, particulates, resins, rosins, fluxes, mold release agents, etc. and salts, metallic complexes, conductive residues, trace metals and oxides, rust, buffing compounds and scale.



Glass, surfaces & parts

Cleaning of glass sheet for display (FPD, LCD, TN, STN, PDP, OLED, ...) and solar protection glass (photovoltaic).

Pre-cleaning and final cleaning of coated and uncoated substrate (borosilicate, soda lime, quartz).

Removal of organic and inorganic residues (metal ion, interleaf paper residues, suspended particles).

In flat glass industry, cleaning of architectural and decorative glass, automotive glass, security glass, coated glass, reflectors and mirror glass. After or before insulating, laminating, printing, coating and silvering processes.

Removal of polishing agent based on cerium oxides from crystal and flat glasses, cutting oils, dusts and particulates, fingerprint, inorganic residues, salts and scale.

- Low working concentration
- Compatible with various cleaning processes
- Free rinse without interfering residues
- Corrosion inhibitors, biodegradable
- Non toxic, non flammable & ozon-friendly



Optics

The cleaning process is one of the most important steps in the optical industry. RBS cleaning agents best suit cleaning of finished product in the manufacturing of optical and scientific lenses (ophthalmic, optical devices ...), cleaning after cutting, grinding and polishing processes and also before control, coating and varnishing. Cleaning molds for production of organic glass. Precision cleaning of mineral glass for spectacles.

Removal of oils and waxes, polishing slurry, finger print, polymerization residues, grease, inorganic residues.



Plastics in precision manufacturing

Typical mild alkaline aqueous RBS detergents perform well in cleaning most plastics which are known as attractive to organic residues and resistant to attack by basic solution. Polycarbonate (PC), polymethylmethacrylate (PMC) and other sensitive plastics should however be cleaned with caution even with a mild alkaline. Use of a neutral detergent for gentle cleaning and processing could constitute an alternative.



Metal working

High performance cleaning and degreasing of precision mechanical components, metal parts and surfaces made of stainless steel, chrome steel, precious metals (gold, silver, platinum,...), soft metals and alloys in automotive industry, aeronautic, watch industry, medical technologies, jewelry, etc.

RBS cleaning agents ensure high residues- free surfaces before painting, coating, varnishing, bonding steps or other subsequent processing to surfaces and parts shaping.

Removal of oils, metal particles, slurries, silicone oil, buffing and polishing compounds, cutting fluids, metal oxides, carbon traces, scale, mineral salts ...



**RBS, your
Reliable partner**

Beside above mentioned industries, RBS cleaning agents are involved in many others applications where performance and quality are required. From the bench scale evaluation to pilot and full scale product use in manufacturing unit, RBS team will closely collaborate with you in optimizing and validating your cleaning processes.

RBS technical support includes products screening, compatibility tests, samples for cleaning trials, TDS, MSDS and CoA.

Applications

Electronic, semiconductors :

Cleaning electronic component, circuit board, assemblies, screens, parts, ceramic insulators & components, silicon wafer, mold dies and cavities

Glass, optic:

Cleaning flat glass, optics & lenses, glass sheet, quartz

Metal working:

Cleaning stainless steel parts, chrome steel ...
Low concentration, temperature and short contact time are recommended for soft metals.

Plastic:

Cleaning parts and surfaces made of resistant plastics. Not recommended for polycarbonate (PC).

Removal of conductive residues, resins, rosins, fluxes, particulates, greases, oils, silicon oils, heavy fatty residues, cutting fluids, mold release agents, buffing compounds, waxes, polishing slurries, epoxy and organic residues.

Delicate substrates:

Anodized part and soft metals (aluminum, brass, copper ...) Require gentle cleaning. It is important to make sure that sensitive metal will not be attacked by any component of the cleaning agent.

Cleaning sensitive glass sheet, optical glass, ophthalmic devices & precision optics.

Removal of organic soils, dusts and fingerprints.

Acid cleaning of metal parts and surfaces, glass:

Last stage of precision cleaning of stainless steel, mineral glass, crystal and flat glass after alkaline cleaning. Final cleaning in LCD and reflector production.

Removal of metal oxides, rouge, scale, mineral salts, metallic complexes, polishing agents based on cerium oxide. Acid cleaning prevents formation of alkalis residues on substrate and brightens metal, glass and plastics.

Alkalis & salts free cleaning:

Glass sheet, lenses, silicon wafer

Removal of light fatty residues, dusts and fingerprint

RBS products

Mild alkaline / **RBS IND 700; RBS IND 740**

Manual, ultrasonic cleaning, soak
1-2%; 50-60°C

Mild alkaline low foam / **RBS 50; RBS IND 750**

Part washer, power wash, spraying, brush system
1-2%; 45-60°C

Heavy duty cleaning:

Alkaline / **RBS IND 705; RBS IND 743**

Manual, soak, circulation
0.5-2%; 40-70°C

Alkaline low foam / **RBS IND 756**

spraying, part washer
0.5-1%; 45-60°C

Neutral / **RBS IND 826**

Weak alkaline / corrosion inhibitors / **RBS IND 721**
Ultrasonic cleaning
1-5%; 20-60°C; 3-5min

Neutral low foam / **RBS A 261**

Part washer, power wash, spraying, brush system
0.5-1%; 45-60°C

Strong acid / **RBS IND 945**

Manual, soak, ultrasonic cleaning
2-5%; 40-60°C

Acid low foam / **RBS IND 950**

Part washer, power wash, spraying
0.2-3%; 45-60°C

Neutral / **RBS B 110** / Mild cleaning

Manual, spraying, ultrasonic cleaning
Ready-to-use solution; Contains surfactant only



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