



RBS DETERGENTS

FOR LABORATORIES

HIGH PERFORMANCE SOLUTIONS FOR RELIABLE AND REPRODUCIBLE RESULTS



COMPETENCE AND EXPERIENCE FOR HIGH PERFORMANCE SOLUTIONS

With more than 50 years of experience, RBS high performance cleaning agents is a trusted product in the world of cleaning agents that offers efficient solutions for a complete range of high performance detergents that meet and fulfill the specific needs in laboratories of control, analysis, research and development in universities, research institutes, clinics and hospitals.

The company's research and development policy is oriented towards the manufacturing of high performance products that respect the environment and meet the requirements of the most recent regulations at the European and International level, such as cGMP (FDA), GMP (EMA). The quality management system of RBS has been certified as complying with the requirement of the quality systems ISO 9001:2008 and ISO 13485:2003 and to the European Directive 93/42/EEC Annex V related to medical devices.

Dedicated to cleaning in various fields, whether in medical, laboratory or other industries; RBS is your trusted partner in cleaning solutions. High performance solutions that meet your needs.

QUALITY CONTROL PRODUCTS

RBS detergents are made under the thorough quality management systems ISO 9001:2008 and ISO 13485:2003, giving you consistent cleaning results everytime.

EFFICIENCY AT LOW CONCENTRATION

RBS detergents present favourable benefit/costs ratio due to the low working concentration that allows the generation of high volume of cleaning solution. Working concentration can be as low as 0.3%; 1 litre of RBS product generates 333 litres of the cleaning solution.

SAFE TO USE

RBS detergents are excellent alternative to hazardous acid mixtures and solvents and allow safe working conditions for both user and cleaned items. RBS cleaning solutions do not produce any atmospheric emissions, health risks or unpleasant smell through normal usage.

COMPATIBLE WITH MOST MATERIALS

RBS detergents show excellent compatibility with most materials including stainless steel, chromed steel, plastic, rubber, porcelain and ceramic.

RINSES OFF RESIDUE FREE

RBS detergents rinse away easily and completely without leaving any traces or films that may interfere with further analysis.

FULLY BIODEGRADABLE INGREDIENTS

RBS detergents are designed to take into account the environmental dimension through the use biodegradable surfactants and offering phosphates-free product options.

Manual/ Ultrasonic Cleaning



-Alkaline washing

Neutral washing

Acidic washing



Removal of organic residues, oils, greases, ointments, biological residues and cell cultures.



For cleaning of sensitive materials (non-ferrous metals such as aluminium, zinc or similar alloys).



Removal of inorganic salts, metal oxides, rust, scale and calcareous deposits.

RBS T 105

- Alkaline Liquid detergent
- High wetting and emulsifying power

Designed for manual, immersion and ultrasonic cleaning of glassware and laboratory equipment made of plastic, stainless steel and porcelain.

Use concentration: 2% v/v in water. pH 2%: 11.8

RBS T 230

- Neutral liquid detergent
- Effective cleaning For Sensitive Materials

Effective cleaning and compatibility with glassware and laboratory equipment sensitive to acidic or alkaline solutions.

Use concentration: 4% v/v in water. pH 4%: 7.3

RBS T 310

- Citric acid -based detergent
- Descaler and oxides remover

Developed with organic acids. Effective against inorganic stains/substances. Gives brightness and original aspect to the cleaned items. Also for animal cages in veterinary institutions, pharmacological and research laboratories.

Use concentration: 2-5% v/v in water.pH 2%: 2.2

RBS T 115

Phosphates-free version

Adapted for laboratories of water control and analysis where the presence of interfering traces of phosphates is undesirable.

Use concentration:

2% v/v in water. pH 2%: 11.7



AUTOMATIC WASHER CLEANING

Alkaline Washing Cycle

RBS 50

Non-foaming alkaline liquid detergent

Contains active chlorine for its decontaminating properties. Combined with the use of the neutralizing agent RBS A 375, it offers perfect result and optimal cleanliness without traces or films. Use concentration:

0.3% v/v in water. pH 0.3%: 10.4



RBS Solid

 Non-foaming alkaline liquid detergent in powder form

For use in automatic machines that require powder detergent.

Use concentration:

0.3% p/v in water. pH 0.3%:

10.6

RBS A 155

• NTA-free, Phosphates-free and Chlorine-Free version

Suitable for laboratories of water control and analysis where the presence of interfering traces of phosphates is undesirable. Offers perfect cleanliness without traces or residues.

Use concentration: 0.3% v/v in water. pH 0.3%: 11.7

Neutral Washing Cycle

RBS A 260

- Neutral liquid detergent
- Effective cleaning for sensitive materials

Recommended for effective cleaning of glassware and laboratory equipment sensitive to acidic or basic solutions. Excellent compatibility with most materials. Use concentration:

0.5% v/v in water. pH 0.5%: 7.8

Acidic Washing Cycle

RBS B 136

- Phosphoric-acid based liquid detergent
- Descaler and oxides remover

Recommended for the mechanical acidic cleaning of laboratory equipment. Also for animal cages in veterinary institutions, pharmacological and research laboratories.

Use concentration: 0.3% v/v in water. pH 0.3%: 3.0

Hand Soap

RBS HDS 15

- Bactericidal soft liquid hand soap
- Gentle on hands, effective against dirt

Recommended for mild hygienic hand washing and decontamination. Neutral pH allows frequent use with prolonged dermal protection. Contains moisturizing agents, quaternary ammonium compounds and glycerine.

Conforms to EN 1040 and EN 1499. Available with pleasant green tea perfume.

Rinsing Cycle

RBS A 375

- Surfactant-free, phosphates-free
- Citric-acid based neutralizer

Allows neutralization and removal of residual traces of carbonates, hydroxides and calcareous elements on cleaned items and on the internal components of washing machine.

Also used during the pre-wash cycle when glassware and material are soiled with mineral residues.

Use concentration:

0.2% v/v in water. pH 0.2%: 2.9 0.5% v/v in water. pH 0.5%: 2.6

Surface Cleaning

RBS FOGLYAM MD

- Neutral liquid detergent for surfaces
- Cleaning and disinfecting agent for surfaces.

Combined action of aldehydes and quatemary ammonium compounds provides a large bactericidal spectrum which prevents the spreading of pathogenic germs and assures safety in high risk area. For daily cleaning and disinfecting of all frequented areas and wipeable surfaces.

Leaves a pleasant citrus fresh smell after treatment.

Use concentration: 1% v/v in water. pH 1%: 6

RBS B 200 A MD

- Neutral liquid detergent for surfaces
- Ready-to-use version

For wiping of benches, furniture, equipment and fume hood. RBS B 200 A MD is a solution of RBS FOGLYAM MD at a concentration above 2.5% v/v, presented in an easy practical hand spray.

RBS products are mainly intended for water-based cleaning processes of glassware and laboratory equipment:

- Manual cleaning
- > Immersion
- Jultrasonic baths
- Automatic washing machines



Alkaline

Suitable for: Plastics made of polyolefin (LDPE, HDPE, PP, PMP...), Stainless steel materials, glass products and ceramics.

Effective against: organic soils, oils, fats, proteins, ointments, creams, blood tissues.

Neutral

Sutiable for: Plastics made of polystyrene PS or polycarbonate PC, non ferrous metals such as aluminium, zinc, tin or their alloys. *Effective against*: organic soils, oils, fats, proteins, ointments, creams.

Acidic

Effective against: Mineral soils (inorganic) removal of scale, lime, metal oxides, mineral salts, rusts.

Cleaning PROCESS

Manual, immersion and ultrasonic baths

Items are soaked into cleaning solution to ensure wetting and penetration action. Agitation by brush or ultrasonic baths for the removal and dispersion of the soils. Higher concentration, temperature of the cleaning solution and stronger agitation will reduce the cleaning time.

Automatic washing

Offers better cleaning for the glassware and laboratory equipment in comparison with the manual, immersion and ultrasonic cleaning processes. Acidic prewash cycle may be necessary for the removal of carbonates, hydroxides, proteins and organic bases such as amines known as "hard to remove" with the alkaline washing.

The treatment in automatic machine offers the following advantages:

- Reproducible process
- Quality control/validation
- Reduced handling
- Protection of personnel
- Economical

Rinsing

An efficient rinsing will remove all detergent residues that may interfere in further analysis and reactions (serologic, cell cultures ...). The acidic rinsing allows the neutralization of residual alkaline traces of the main washing cycle and thus prevents the calcareous deposits to form on both the cleaned items and the internal components of the machine.

Drying

Glasswares/equipments should be dried on a simple or air pulsed drying rack or drying oven at 80-90°C. In automatic washing machine. The cleaned items easily dry due to the residual heat of the washing and rinsing cycles.



Other NDUSTRIES

High performance cleaning detergents for various applications

RBS detergents are exclusively intended for water-based cleaning processes. The surfactants involved are biodegradable and working conditions are safer. RBS cleaning solutions do not produce neither atmospheric emission nor health risks nor unpleasant smells for users. RBS products respect hygiene norms like HACCP for the **agroalimentary** sector as well as GMP norms frequently used in the **pharmaceutical** and **cosmetic** sectors.

RBS range provides a wide selection of extremely efficient and economical cleaning agents for the following industries:

- Pharmaceutical & Cosmetic
- Biotechnology
- Glass & Optics
- Electronics
- Metal Works
- Chemical & Oil

RECAPIT	UL	ΑI	IV	E	I A	BI	<u>-</u> E											
	Process				Use			Physical and chemical properties										
	Manual / Spray	Immersion	Ultrasonic bath	Washing machine	Cleaning - Degreasing	Descaling - Desoxidizing	Prewash -Neutralization	Concentrated liquid	Powder	Acid	Neutral	Alkaline	Foaming	Non foaming	Phosphates-free	Contains phosphoric acid	Contains organic acid	working concentration (pH)
RBS T 105		•	•		•			•				•	•					2% (11.8)
RBS T 115	•	•	•		•			•				•	•		•			2% (11.7)
RBS T 230		•	•		•			•			•		•					4% (7.3)
RBS T 310		•	•		•	•		•		•							•	2% (2.2)
RBS 50				•	•			● 2				•		•				0.3% (10.4)
RBS SOLID				•	•				•			•		•				0.3% (10.6)
RBS A 155				•	•			•				•		•	•			0.3% (11,7)
RBS A 260				•	•			•			•			•				0.5% (7.8)
RBS B 136				•	•	•		•		•				•		•		0.3% (3.0)
RBS A 375				•		•	•	•		•				•	•		•	0.2% (2.9)
RBS FOGLYAM MD	•				•			•			•			•				1% (6.0)
RBS B 200 A MD									•					•				1% (6.0)



2304 Bedok Reservoir Road, Bedok Industrial Park C, Singapore 479223 t: (65) 6444 2678 | f: (65) 6743 7172 | e: s1_marketing@douyee.com.sg Web: www.douyee.com