

Section 1: Identification of the Mixture and of the Company

1.1 Product Identifier

Trade Name: Ultrasonic Cleaner for Optics and Lenses

1.2 Relevant Identified Uses of the substance or mixture and uses advised against

Cleaning Product for Professional and Amateur Use

1.3 Details of the supplier of the safety data sheet

Address and Telephone Number of the Supplier

R&D Laboratories Ltd
Unit U, Enkalon Industrial Estate
Antrim, BT41 4LJ
Northern Ireland
Tel: +44 (0)2894 465753

1.4 Emergency Telephone Number

+44 (0)2894 465753 Mon-Fri 9:00 - 17:00 - R&D Laboratories Ltd
+44 (0) 844-892-0111 National Poisons Information Service (24H)

Section 2: Hazards Identification

2.1 Classification of substance or mixture

Classification according to regulation EC No 1272/2008



GHS05: Corrosion

Met Corr. 1

H290 May be corrosive to metals.

Skin Corr. 1B

H314 Causes severe skin burns and eye damage.

2.2 Label Elements



Signal Word: Danger

Hazard-determining Components of Labelling

Sodium Metasilicate Pentahydrate

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Hazard Statements

H290 May be corrosive to metals

H314 Causes severe skin burns and eye damage

Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.

P301+330+331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P310: Immediately call a POISON CENTER or doctor.

P363: Wash contaminated clothing before reuse.

2.3 Other Hazards

No other hazards have been identified for this product.

Section 3: Composition / Information on Ingredients

3.2 Mixtures

Description: Concentrated cleaning fluid for use in Ultrasonic Baths.

CAS: 10213-79-3	Sodium Metasilicate Pentahydrate Met. Corr. 1, H290; Skin Corr. 1B, H314; STOT SE3 (Inhalation) H335;	5-10%
CAS: 67-63-0 EC: 200-661-7 Index: 603-117-00-0	propan-2-ol Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336;	5-10%
CAS: 66455-14-9	C12-13 Alcohol Ethoxylates Eye Damage 1, H318; Acute Tox. 4, H302; Aquatic Chronic 3 (M=1), H412;	<5%
CAS: 111-76-2 EC: 203-905-0 Index: 603-014-00-0	2-Butoxyethanol Skin Irrit. 2, H315; Eye Irrit. 2, H319; Acute Tox. 4, H302; Acute Tox 4, H312;	<5%

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CAS: 61789-40-0 EC: 263-058-8	Cocamidopropyl Betaine Skin Irrit. 2, H315; Eye Irrit. 2, H319;	<5%
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Section 4: First Aid Measures

4.1 Description of first aid measures

General information Personal protection for the First Aider.

After inhalation Supply fresh air; consult doctor in case of symptoms.

After skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF ON SKIN: Wash with plenty of soap and water.

After eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a doctor immediately.

After swallowing IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Bring vomiting person into recovery position. Do not give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Corrosive damage to gastro-intestinal tract.

Information for doctor Probable mucosal damage may contraindicate the use of gastric lavage.

Danger Danger of gastric perforation.

4.3 Indication of any immediate medical attention and special treatment needed

If swallowed, gastric irrigation with activated carbon.

Rinse eyes thoroughly with physiological saline.

Section 5: Firefighting Measures

5.1 Extinguishing media

Suitable extinguishing agents Water spray jet, extinguishing powder, CO₂, foam. ·

Unsuitable extinguishing agents for reasons of safety: None

5.2 Special hazards arising from the substance or mixture

In case of fire, toxic incineration products may be released such as: Carbon monoxide (CO) Hydrogen chloride (HCl) Ammonia (NH₃) Formaldehyde (HCHO)

5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact with skin and eyes.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Keep unprotected persons away. When selecting the protective suit attention has to be paid to the complete and safe protection of skin and mucous membranes. Impermeable protective clothes, protective boots made of neoprene, complete face protection and nitrile-rubber-gloves with long tops should be worn.

Particular danger of slipping on leaked/spilled product.

6.2 Environmental precautions

Do not discharge into drains or rivers. Contain the spillage using bunding

6.3 Methods and material for containment and cleaning up

Absorb into dry earth, sand or other inert absorbent material. Transfer to a closable, labelled salvage container for disposal by an appropriate method.

6.4 Reference to other sections

None

Section 7: Handling and Storage

7.1 Precautions for safe handling

Ensure good exhaust ventilation at the workplace. It is preferable to handle the product in a closed system. Load carefully, avoid splashes. Risks to the safety and health of workers may not only be created by work involving chemicals but, inter alia by work equipment and the fitting-out of work-places. Those risks shall be identified and evaluated.

7.2. Conditions for safe storage, including any incompatibilities

Store in cool, well ventilated area. Keep container tightly closed.

Store away from foodstuffs. Protect from excesses of heat and cold.

7.3 Specific End Use(s)

No relevant information available

Section 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Components with critical values that require monitoring at the workplace:

111-76-2 2-butoxyethanol (<5%)

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WEL	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm
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67-63-0 propan-2-ol (5-10%)

WEL	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm
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8.2 Exposure Controls

Appropriate engineering controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Ensure adequate ventilation of the working area.

Personal protective equipment

Eye/face protection Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

State: Liquid
Colour: Clear

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Odour: Slight
Solubility in Water: Highly soluble in water
pH: > 7
Flash Point: Not determined
Boiling Point: Not determined
Specific Gravity: approx 1.0 g/cm³

9.2 Other information

No data available

Section 10: Stability and Reactivity

10.1. Reactivity

Stable under recommended transport or storage conditions. Corrosive action on metals is possible.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions will not occur under normal transport or storage conditions. Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid Heat.

10.5. Incompatible materials

Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

No data available.

Section 11: Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity:

LD/LC50 values that are relevant for classification:

Oral ATE mix > 2000 mg/kg (calculated/estimated)

Dermal ATE mix > 2000 mg/kg (calculated/estimated)

Symptoms / Routes of Exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be pain and redness. The eyes may water profusely. There may be severe pain. The vision may become blurred. May cause permanent damage.

Ingestion: There may be soreness and redness of the mouth and throat. Nausea and stomach pain may occur.

Inhalation: There may be irritation of the throat with a feeling of tightness in the chest.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological Information

12.1. Toxicity Ecotoxicity

No data available.

12.2. Persistence and degradability

Biodegradable.

12.3. Bioaccumulative potential

No bioaccumulation potential.

12.4. Mobility in soil

Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT substance.

12.6. Other adverse effects

No data available.

Section 13: Disposal Considerations

13.1. Waste treatment methods

Disposal operations: Transfer to a suitable container and arrange for collection by specialised disposal company.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport Information

14.1. UN number

UN1760

14.2. UN proper shipping name

CORROSIVE LIQUID, N.O.S. (SODIUM METASILICATE PENTAHYDRATE)

14.3. Transport hazard class(es)



Class 8

14.4. Packing group

III

14.5. Environmental hazards

Environmentally hazardous: No

Marine pollutant: No

14.6. Special precautions for user

No special precautions.

Tunnel code: E

Transport category: 3

Section 15: Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

Section 16: Other Information

This data is based on our current knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally valid contractual relationship.

Product classification has been carried out using: Summation Method

Some values may have been calculated or estimated using appropriate methods. No guarantees are given, express or implied, regarding the accuracy of the data presented.

Clarification of terms used in section 3

H225 Highly flammable liquid and vapour.

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H312 Harmful in contact with skin.

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H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H412 Harmful to aquatic life with long lasting effects.