



# SAFETY DATA SHEET

Alurex

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Product name** : Alurex  
**Product description** : Aluminium. Cleaning solutions.  
**Product type** : Liquid.  
**UFI** : 1G40-303R-J00C-3TSA

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses	
Industrial Professional	
Uses advised against	Reason
Consumer use	Product is not intended for consumer use.

### 1.3 Details of the supplier of the safety data sheet

RUST-OLEUM EUROPE  
Martin Mathys NV, Kolenbergstraat 23, B-3545 Zelem, Belgium  
Telephone no.: +32 (0) 13 460 200  
Fax no.: +32 (0) 13 460 201

Tor Coatings Limited  
Unit 21, White Rose Way, Follingsby Park, Gateshead, Tyne & Wear, NE10 8YX United Kingdom  
Telephone no.: +44 (0) 191 4106611  
Fax no.: +44 (0) 191 4920125  
enquiries@tor-coatings.com

**e-mail address of person responsible for this SDS** : rpmeurohas@rustoleum.eu

### 1.4 Emergency telephone number

[National advisory body/Poison Centre](#)

[Supplier](#)

Telephone number United Kingdom: : +44 870 8200418 / +44 2038073798  
Great Britain

Hours of operation : 24 / 7

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

[Classification according to Regulation \(EC\) No. 1272/2008 \[CLP/GHS\]](#)

Skin Corr. 1, H314

Eye Dam. 1, H318

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

## SECTION 2: Hazards identification

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : H314 - Causes severe skin burns and eye damage.

**Precautionary statements**

**General** : Not applicable.

**Prevention** : P280 - Wear protective gloves, protective clothing and eye or face protection.

**Response** : P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor.  
P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor.  
P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

**Storage** : P405 - Store locked up.

**Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : phosphoric acid

**Supplemental label elements** : Not applicable.

**Supplemental label elements : Detergents - Regulation (EC) No 907/2006** : For professional use only. This information is provided by the present Safety Data Sheet.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

**Special packaging requirements**

**Containers to be fitted with child-resistant fastenings** : Not applicable.

**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : None known.

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## SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

United Kingdom: Great Britain

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
phosphoric acid	REACH #: 01-2119485924-24 EC: 231-633-2 CAS: 7664-38-2	≥10 - ≤25	Met. Corr. 1, H290 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318	ATE [Oral] = 1530 mg/kg Skin Corr. 1B, H314: C ≥ 25% Skin Irrit. 2, H315: 10% ≤ C < 25% Eye Dam. 1, H318: C ≥ 25% Eye Irrit. 2, H319: 10% ≤ C < 25%	[1] [2]
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	EC: 201-069-1 CAS: 5949-29-1	≤10	Eye Irrit. 2, H319	-	[1]
2-butoxyethanol	EC: 203-905-0 CAS: 111-76-2	≤10	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Irrit. 2, H319	ATE [Oral] = 1200 mg/kg ATE [Inhalation (vapours)] = 3 mg/l	[1] [2]
hydrochloric acid	REACH #: 01-2119484862-27 EC: 231-595-7 CAS: 7647-01-0 Index: 017-002-01-X	≤5	Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335  <b>See Section 16 for the full text of the H statements declared above.</b>	Skin Corr. 1B, H314: C ≥ 25% Skin Irrit. 2, H315: 10% ≤ C < 25% Eye Dam. 1, H318: C ≥ 25% Eye Irrit. 2, H319: 10% ≤ C < 25% STOT SE 3, H335: C ≥ 10%	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

### Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### Eye contact

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

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## SECTION 4: First aid measures

- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### 4.2 Most important symptoms and effects, both acute and delayed

#### Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### 4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** : None known.

### 5.2 Special hazards arising from the substance or mixture

**Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous combustion products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
phosphorus oxides  
halogenated compounds

### 5.3 Advice for firefighters

**Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

**Additional information** : No unusual hazard if involved in a fire.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and material for containment and cleaning up

**Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill** : Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same

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## SECTION 6: Accidental release measures

hazard as the spilled product.

- 6.4 Reference to other sections** : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

- Recommendations** : Reserved for industrial and professional use.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

#### **United Kingdom: Great Britain**

Product/ingredient name	Exposure limit values
phosphoric acid	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> STEL: 2 mg/m <sup>3</sup> 15 minutes. TWA: 1 mg/m <sup>3</sup> 8 hours.
2-butoxyethanol	<b>EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed through skin.</b> STEL: 50 ppm 15 minutes. TWA: 25 ppm 8 hours.
hydrochloric acid	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> STEL: 8 mg/m <sup>3</sup> 15 minutes. Form: (gas and aerosol mists) STEL: 5 ppm 15 minutes. Form: (gas and aerosol mists) TWA: 2 mg/m <sup>3</sup> 8 hours. Form: (gas and aerosol mists)

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## SECTION 8: Exposure controls/personal protection

TWA: 1 ppm 8 hours. Form: (gas and aerosol mists)

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
phosphoric acid	DNEL	Long term Inhalation	2,92 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Inhalation	0,73 mg/m <sup>3</sup>	General population [Consumers]	Local
2-butoxyethanol	DNEL	Short term Inhalation	426 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	38 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	49 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	135 mg/m <sup>3</sup>	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	50 mg/m <sup>3</sup>	General population [Consumers]	Local
	DNEL	Long term Dermal	75 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Inhalation	20 mg/m <sup>3</sup>	General population [Consumers]	Systemic
	DNEL	Long term Oral	3,2 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Dermal	44,5 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	13,4 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	123 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Oral	3,2 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	147 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Oral	6,3 mg/kg	General population	Systemic
DNEL	Long term Inhalation	59 mg/m <sup>3</sup>	General population	Systemic	
DNEL	Short term Dermal	89 mg/kg	General population	Systemic	

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## SECTION 8: Exposure controls/personal protection

	DNEL	Short term Oral	26,7 mg/kg	General population	Systemic
	DNEL	Short term Inhalation	426 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Short term Inhalation	246 mg/m <sup>3</sup>	Workers	Local
	DNEL	Long term Dermal	125 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	98 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Dermal	89 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	1091 mg/m <sup>3</sup>	Workers	Systemic

### PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
2-butoxyethanol	Fresh water	8,8 mg/l	-
	Marine	0,88 mg/l	-
	Sewage Treatment Plant	463 mg/l	-
	Fresh water sediment	34,6 mg/kg	-
	Marine water sediment	3,46 mg/kg	-
	Secondary Poisoning	2,8 mg/kg	-
	Soil	2,33 mg/kg	-
	Secondary Poisoning	20 mg/kg	-

## 8.2 Exposure controls

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Individual protection measures

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Use eye protection according to EN 166. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### Skin protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.



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## SECTION 8: Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): Butyl rubber gloves (0.60mm), PVC (0.5mm) and natural rubber (latex) (0.5mm)
- The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN374. The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Wear apron or coverall if there is a risk of exposure to splashes. (EN 467)
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Filter type: ABEK (EN 141)
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

- Physical state** : Liquid.
- Colour** : Transparent
- Odour** : acidic smell [Slight]
- Odour threshold** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : 90 to 171°C (194 to 339,8°F) [Literature]
- Flammability (solid, gas)** : Not available.
- Lower and upper explosion limit** : Not available.
- Flash point** : Not relevant due to nature of the product.
- Auto-ignition temperature** : Not relevant due to nature of the product.
- Decomposition temperature** : Not available.
- pH** : 1 [Conc. (% w/w): 100%] [OECD 122]
- pH : Justification** : Not available.
- Viscosity** : Not available.
- Solubility(ies)** :
- Not available.

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## SECTION 9: Physical and chemical properties

<b>Solubility in water</b>	: Not available.
<b>Miscible with water</b>	: Yes.
<b>Partition coefficient: n-octanol/ water</b>	: Not applicable.
<b>Vapour pressure</b>	: 2,1 kPa (15,75 mm Hg) [Literature]
<b>Evaporation rate</b>	: Not available.
<b>Relative density</b>	: Not available.
<b>Density</b>	: 1,105 g/cm <sup>3</sup> [20°C (68°F)] [DIN 53217]
<b>Vapour density</b>	: Not available.
<b>Explosive properties</b>	: No unusual hazard if involved in a fire.
<b>Oxidising properties</b>	: Not available.
<b>Particle characteristics</b>	
<b>Median particle size</b>	: Not applicable.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: No specific data.
<b>10.5 Incompatible materials</b>	: Attacks many metals producing extremely flammable hydrogen gas which can form explosive mixtures with air. Reactive or incompatible with the following materials: alkalis
<b>10.6 Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
phosphoric acid	LD50 Oral	Rat	1530 mg/kg	-
2-butoxyethanol	LD50 Oral	Guinea pig	1414 mg/kg	-
	LD50 Oral	Guinea pig	1400 mg/kg	-
	LD50 Oral	Rat	1300 mg/kg	-
	LD50 Oral	Rat	1746 mg/kg	-
	LD50 Oral	Rat	1400 mg/kg	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

#### Acute toxicity estimates

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## SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
phosphoric acid	1530	N/A	N/A	N/A	N/A
2-butoxyethanol	1200	N/A	N/A	3	N/A

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	Eyes - Mild irritant	Rabbit	-	0,5 minutes	-
2-butoxyethanol	Eyes - Moderate irritant	Rabbit	-	5 milligrams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 100 milligrams	-
	Skin - Irritant	Rabbit	-	100 milligrams	-
hydrochloric acid	Eyes - Mild irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Human	-	0,5 minutes 5 milligrams	-
				24 hours 4 Percent	-

### Conclusion/Summary

- Skin** : Causes severe skin burns and eye damage.  
**Eyes** : Causes serious eye damage.  
**Respiratory** : Based on available data, the classification criteria are not met.

### Sensitisation

#### Conclusion/Summary

- Skin** : Based on available data, the classification criteria are not met.  
**Respiratory** : Based on available data, the classification criteria are not met.

### Mutagenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Carcinogenicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Reproductive toxicity

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
phosphoric acid	Negative - Oral	Rat	410 mg/kg	-

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
hydrochloric acid	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

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## SECTION 11: Toxicological information

**Information on likely routes of exposure** : Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

- Eye contact** : Causes serious eye damage.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : Causes severe burns.  
**Ingestion** : No known significant effects or critical hazards.

### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion** : Adverse symptoms may include the following:  
stomach pains

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

#### Short term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Long term exposure

- Potential immediate effects** : Not available.  
**Potential delayed effects** : Not available.

#### Potential chronic health effects

Not available.

- Conclusion/Summary** : Based on available data, the classification criteria are not met.  
**General** : No known significant effects or critical hazards.  
**Carcinogenicity** : No known significant effects or critical hazards.  
**Mutagenicity** : No known significant effects or critical hazards.  
**Reproductive toxicity** : No known significant effects or critical hazards.

## 11.2 Information on other hazards

### 11.2.1 Endocrine disrupting properties

Not available.

### 11.2.2 Other information

Not available.

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## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
phosphoric acid 2-butoxyethanol	Acute LC50 138 mg/l	Fish	24 hours
	Acute EC50 1700 to 1940 mg/l	Daphnia spec. - Daphnia magna	24 hours
	Acute EC50 >1000 mg/l Fresh water	Daphnia spec. - Daphnia magna	48 hours
	Acute LC50 1000 mg/l Marine water	Crustaceans - Chaetogammarus marinus - Young	48 hours
hydrochloric acid	Acute LC50 1000 to 800000 µg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 1490000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 1250000 µg/l Marine water	Fish - Menidia beryllina	96 hours
	Acute LC50 240 mg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours
	Acute LC50 260 mg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 282 mg/l Fresh water	Fish - Gambusia affinis - Adult	96 hours

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
2-butoxyethanol	OECD 301B	90,4 % - Readily - 28 days	-	-
	OECD 301E	>70 % - Readily - 28 days	-	-
	-	32,27 % - Inherent - 5 days	-	-

**Conclusion/Summary** : The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2-butoxyethanol	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
1,2,3-Propanetricarboxylic acid, 2-hydroxy-, hydrate (1:1)	-1,72	-	low
2-butoxyethanol	0,81	3,2	low
hydrochloric acid	0,3	-	low

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6 Endocrine disrupting properties

Not available.

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## SECTION 12: Ecological information

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.





**Hazardous waste** : Yes.

#### European waste catalogue (EWC)

Waste code	Waste designation
20 01 29*	detergents containing hazardous substances

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
<b>14.1 UN number or ID number</b>	UN1760	UN1760	UN1760	UN1760
<b>14.2 UN proper shipping name</b>	Corrosive liquid, n.o.s. (phosphoric acid)	Corrosive liquid, n.o.s. (phosphoric acid)	Corrosive liquid, n.o.s. (phosphoric acid)	Corrosive liquid, n.o.s. (phosphoric acid)
<b>14.3 Transport hazard class(es)</b>	8 	8 	8 	8 
<b>14.4 Packing group</b>	II	II	II	II
<b>14.5 Environmental hazards</b>	No.	No.	No.	No.
<b>Additional information</b>	<b>Limited quantity</b> : ≤ 1L <b>Tunnel code</b> (E)		<b>Emergency schedules</b> F-A, S-B <b>Remarks</b> : ≤ 1L: Limited Quantity - IMDG 3.4	<b>Quantity limitation</b> Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only: 30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft:

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## SECTION 14: Transport information

0,5 L. Packaging instructions: Y840.

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to IMO instruments** : Not available.

## SECTION 15: Regulatory information

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

#### Other EU regulations

**VOC for Ready-for-Use Mixture** : Not applicable.

**Industrial emissions (integrated pollution prevention and control) - Air** : Listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

#### United Kingdom: Great Britain

##### UK (GB) /REACH

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

###### Ozone depleting substances

Not listed.

###### Prior Informed Consent (PIC)

Not listed.

###### Persistent Organic Pollutants

Not listed.

**Aerosol dispensers** :

###### Seveso Directive

This product is not controlled under the Seveso Directive.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

###### International regulations

###### Stockholm Convention on Persistent Organic Pollutants

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## SECTION 15: Regulatory information

List name	Ingredient name	Status
Not listed.		

### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

### UNECE Aarhus Protocol on POPs and Heavy Metals

List name	Ingredient name	Status
Not listed.		

CN code : 3405 90 10 00

### Inventory list

<b>Australia</b>	: All components are listed or exempted.
<b>Canada</b>	: All components are listed or exempted.
<b>China</b>	: All components are listed or exempted.
<b>Eurasian Economic Union</b>	: <b>Russian Federation inventory</b> : Not determined.
<b>Japan</b>	: <b>Japan inventory (CSCL)</b> : All components are listed or exempted. <b>Japan inventory (ISHL)</b> : Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Thailand</b>	: Not determined.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: Not determined.
<b>Viet Nam</b>	: Not determined.

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

Indicates information that has changed from previously issued version.

<b>Abbreviations and acronyms</b>	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number SGG = Segregation Group vPvB = Very Persistent and Very Bioaccumulative
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### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Corr. 1, H314 Eye Dam. 1, H318	Expert judgment Expert judgment

### Full text of abbreviated H statements

### United Kingdom: Great Britain



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## SECTION 16: Other information

<b>Full text of abbreviated H statements</b>	:	H290 H302 H314 H315 H318 H319 H331 H335	May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Causes skin irritation. Causes serious eye damage. Causes serious eye irritation. Toxic if inhaled. May cause respiratory irritation.
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<b>Full text of classifications [CLP/GHS]</b>	:	Acute Tox. 3 Acute Tox. 4 Eye Dam. 1 Eye Irrit. 2 Met. Corr. 1 Skin Corr. 1 Skin Corr. 1B Skin Irrit. 2 STOT SE 3	ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 CORROSIVE TO METALS - Category 1 SKIN CORROSION/IRRITATION - Category 1 SKIN CORROSION/IRRITATION - Category 1B SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
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### Notice to reader

**IMPORTANT NOTE:** The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates. Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

**MANUFACTURER'S DISCLAIMER:** the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.