



SAFETY DATA SHEET

Pegagraff Cleaner

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

1.1 Product identifier

Product name : Pegagraff Cleaner
Product description : Paint remover. Cleaning solutions.
Product type : Liquid.
UFI : PMU0-10H3-C00T-W3QU

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

Identified uses	
Industrial uses Consumer uses Professional uses	
Uses advised against	Reason
None identified.	-

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

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

1.4 Emergency telephone number

Supplier

Telephone number : +44 (0) 207 858 1228
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]

Acute Tox. 4, H302
 Acute Tox. 4, H332
 Skin Corr. 1B, H314
 Eye Dam. 1, H318
 STOT SE 3, H335

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.

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage. May cause respiratory irritation.
<u>Precautionary statements</u>		
General	:	P103 - Read label before use. P102 - Keep out of reach of children. P101 - If medical advice is needed, have product container or label at hand.
Prevention	:	P280 - Wear protective gloves and eye protection: - butyl rubber gloves and Safety glasses with side shields. P261 - Avoid breathing vapour. P271 - Use only outdoors or in a well-ventilated area.
Response	:	P301 - IF SWALLOWED: P330 - Rinse mouth. P331 - Do NOT induce vomiting. P303 - IF ON SKIN (or hair): P361 - Take off immediately all contaminated clothing. P353 - Rinse skin with water or shower. P310 - Immediately call a doctor. P305 - IF IN EYES: P351 - Rinse cautiously with water for several minutes. P338 - Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	:	P405 - Store locked up.
Disposal	:	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	:	benzyl alcohol and 2-aminoethanol
Supplemental label elements	:	Not applicable.
Detergents - Regulation (EC) No 907/2006 - Annex VII A	:	30% and more: BENZYL ALCOHOL.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
<u>Special packaging requirements</u>		
Containers to be fitted with child-resistant fastenings	:	Yes, applicable.
Tactile warning of danger	:	Yes, 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.

SECTION 3: Composition/information on ingredients**3.2 Mixtures** : Mixture

Product/ingredient name	Identifiers	%	Classification	
			Regulation (EC) No. 1272/2008 [CLP]	Type
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥50 - ≤75	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]
2-aminoethanol	EC: 205-483-3 CAS: 141-43-5 Index: 603-030-00-8	≥10 - ≤25	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Chronic 3, H412	[1] [2]
2-(2-butoxyethoxy) ethanol	REACH #: 01-2119475104-44 EC: 203-961-6 CAS: 112-34-5 Index: 603-096-00-8	≤5	Eye Irrit. 2, H319	[1] [2]
propan-2-ol	REACH #: 01-2119457558-25 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0	≤5	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1] [2]
See Section 16 for the full text of the H statements declared above.				

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
 [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
 [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
 [5] Substance of equivalent concern
 [6] Additional disclosure due to company policy

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

SECTION 4: First aid measures**4.1 Description of first aid measures**

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do not induce vomiting. If affected person is conscious, give plenty of water to drink.

SECTION 4: First aid measures

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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

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 : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing media : Do not use water jet.

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.

SECTION 5: Firefighting measures

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 nitrogen oxides
- 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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling : Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Recommendations : Not available.

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

Product/ingredient name	Exposure limit values
2-aminoethanol	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 7,6 mg/m ³ 15 minutes. STEL: 3 ppm 15 minutes. TWA: 1 ppm 8 hours. TWA: 2,5 mg/m ³ 8 hours.
2-(2-butoxyethoxy)ethanol	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes. TWA: 67,5 mg/m ³ 8 hours. STEL: 101,2 mg/m ³ 15 minutes.
propan-2-ol	EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 1250 mg/m ³ 15 minutes. STEL: 500 ppm 15 minutes. TWA: 999 mg/m ³ 8 hours. TWA: 400 ppm 8 hours.

SECTION 8: Exposure controls/personal protection

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
benzyl alcohol	DNEL	Short term Dermal	47 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	450 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	9,5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	90 mg/m ³	Workers	Systemic
	DNEL	Short term Dermal	28,5 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Inhalation	40,55 mg/m ³	Consumers	Systemic
	DNEL	Short term Oral	25 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Dermal	5,7 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	8,11 mg/m ³	Consumers	Systemic
	DNEL	Long term Oral	5 mg/kg bw/day	Consumers	Systemic
2-(2-butoxyethoxy)ethanol	DNEL	Long term Inhalation	67,5 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	67,5 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	20 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	50,6 mg/m ³	Consumers	Local
	DNEL	Long term Inhalation	34 mg/m ³	Consumers	Local
	DNEL	Long term Inhalation	34 mg/m ³	Consumers	Systemic
	DNEL	Long term Dermal	10 mg/kg bw/day	Consumers	Systemic
	propan-2-ol	DNEL	Short term Dermal	888 mg/kg bw/day	Workers
DNEL		Short term Inhalation	500 mg/m ³	Workers	Systemic
DNEL		Short term Dermal	319 mg/kg bw/day	Consumers	Systemic
DNEL		Short term Inhalation	89 mg/m ³	Consumers	Systemic
DNEL		Short term Oral	26 mg/kg bw/day	Consumers	Systemic

PNECs

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Compartment Detail	Value	Method Detail
benzyl alcohol	Fresh water	1 mg/l	Assessment Factors
	Marine	0,1 mg/l	Assessment Factors
	Fresh water sediment	5,27 mg/kg	Assessment Factors
	Marine water sediment	0,527 mg/kg	Assessment Factors
	Soil	0,456 mg/kg	Assessment Factors
	Sewage Treatment Plant	39 mg/l	Assessment Factors
2-(2-butoxyethoxy)ethanol	Fresh water	1 mg/l	-
	Marine	0,1 mg/l	-
	Fresh water sediment	4 mg/kg	-
	Marine water sediment	0,4 mg/kg	-
	Sewage Treatment Plant	200 mg/l	-
	propan-2-ol	Fresh water	140,9 mg/l
Marine		140,9 mg/l	-
Fresh water sediment		552 mg/kg	-
Marine water sediment		552 mg/kg	-
Soil		28 mg/kg	-
Sewage Treatment Plant		2251 mg/l	-

8.2 Exposure controls

Appropriate engineering controls : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

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. 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. Recommended: face shield (EN 166) .

Skin protection

Hand 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.

Gloves : For prolonged or repeated handling, use the following type of gloves:

Recommended: natural rubber (latex) or Viton®.

The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

EN 374

SECTION 8: Exposure controls/personal protection

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: overall (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** : Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: In case of insufficient ventilation, wear suitable respiratory equipment: organic vapour (Type A) and acid gas (Type E) filter (EN 141).
- Environmental exposure controls** : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties****Appearance**

- Physical state** : Liquid.
- Colour** : Colourless.
- Odour** : Characteristic.
- Odour threshold** : Not available.
- pH** : 12,2
- Melting point/freezing point** : <-10°C
- Initial boiling point and boiling range** : >85°C
- Flash point** : Closed cup: >75°C [Setaflash / Tag (ASTM D56)]
- Evaporation rate** : >1 (butyl acetate = 1)
- Flammability (solid, gas)** : Not available.
- Upper/lower flammability or explosive limits** : Lower: 1%
Upper: 13%
Vapours may form explosive mixtures with air.
- Vapour pressure** : 0,02 kPa [room temperature]
- Vapour density** : >1 [Air = 1]
- Relative density** : 1,02
- Solubility(ies)** : Partially soluble in the following materials: cold water and hot water.
- Solubility in water** : 290 g/l
- Partition coefficient: n-octanol/ water** : <1
- Auto-ignition temperature** : 228°C
- Decomposition temperature** : Not available.
- Viscosity** : Dynamic (room temperature): Not applicable.
- Explosive properties** : Not available.
- Oxidising properties** : Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.
- 10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
- 10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO₂ and smoke can be generated.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	LC50 Inhalation Vapour	Rat	>4178 mg/l	4 hours
	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	1230 mg/kg	-
2-aminoethanol	LD50 Oral	Rat	1720 mg/kg	-
	2-(2-butoxyethoxy)ethanol	LD50 Dermal	Rabbit	2700 mg/kg
		LD50 Oral	Rat	4500 mg/kg
propan-2-ol	LC50 Inhalation Vapour	Rat	30 mg/l	4 hours
	LC50 Inhalation Vapour	Rat	16000 ppm	4 hours
	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-

Conclusion/Summary : Harmful if swallowed. Harmful if inhaled.

Acute toxicity estimates

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
benzyl alcohol	Skin - Moderate irritant	Pig	-	100 Percent	-
	2-aminoethanol	Eyes - Severe irritant	Rabbit	-	250 Micrograms
		Skin - Moderate irritant	Rabbit	-	505 milligrams
2-(2-butoxyethoxy)ethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	propan-2-ol	Eyes - Severe irritant	Rabbit	-	20 milligrams
		Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-

Conclusion/Summary

SECTION 11: Toxicological information

Skin : Causes severe skin burns and eye damage.

Eyes : Causes serious eye damage.

Respiratory : May cause respiratory irritation.

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

Product/ingredient name	Test	Experiment	Result
propan-2-ol	OECD 471	Subject: Bacteria	Negative

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

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	Negative - Oral - TD	Rat	-	103 weeks; 5 days per week

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
benzyl alcohol	Negative - Route of exposure unreported	Mouse - Female	550 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
2-aminoethanol	Category 3	Not applicable.	Respiratory tract irritation
propan-2-ol	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

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.

SECTION 11: Toxicological information

Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information**12.1 Toxicity**

There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment, but contains substance(s) hazardous to the environment. See section 3 for details.

Product/ingredient name	Result	Species	Exposure
benzyl alcohol	Acute EC50 770 mg/l	Algae	72 hours
	Acute LC50 646 mg/l	Fish - Leuciscus idus	48 hours
	Acute LC50 460000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
2-aminoethanol	Acute EC50 80000 µg/l Fresh water	Algae - Isochrysis galbana	96 hours
	Acute LC50 >100000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
2-(2-butoxyethoxy)ethanol	Acute LC50 170000 µg/l Fresh water	Fish - Carassius auratus	96 hours
	Acute EC50 2850 mg/l	Daphnia spec.	48 hours
	Acute IC50 >100 mg/l	Algae	96 hours
propan-2-ol	Acute LC50 1300000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours
	Acute LC50 1400 to 1950 mg/l Marine water	Crustaceans - Crangon crangon	48 hours
	Acute LC50 9640 to 10000 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
	Acute LC50 1400 mg/l	Fish - Gambusia affinis	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
benzyl alcohol	OECD 301A	96 % - Readily - 21 days	-	-
propan-2-ol	-	>70 % - Readily - 10 days	7 mg/l	-

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
benzyl alcohol	-	-	Readily
2-(2-butoxyethoxy)ethanol	-	-	Readily
propan-2-ol	-	-	Readily

12.3 Bioaccumulative potential

SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
benzyl alcohol	1,1	-	low
2-aminoethanol	-1,3	-	low
propan-2-ol	0,05	-	low
2-(2-butoxyethoxy)ethanol	0,56	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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 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.

Disposal considerations : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
20 01 13*	Solvents





Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN3267	UN3267	UN3267	UN3267
14.2 UN proper shipping name	Corrosive liquid, n.o.s. [2-aminoethanol]	Corrosive liquid, n.o.s. [2-aminoethanol]	Corrosive liquid, n.o.s. [2-aminoethanol]	Corrosive liquid, n.o.s. [2-aminoethanol]
14.3 Transport hazard class(es)	8 	8 	8 	8 
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	<p>Limited quantity: LQ7</p> <p>Remarks: (≤ 5L:) Limited Quantity - ADR/IMDG 3.4</p> <p>ADR Tunnel code: (E)</p>	-	<p>Emergency schedules (EmS): F-A + S-B</p> <p>Remarks: (≤ 5L:) Limited Quantity - ADR/IMDG 3.4.6</p>	<p>Passenger and Cargo Aircraft Quantity limitation: 5 L Packaging instructions: 852</p> <p>Cargo Aircraft Only Quantity limitation: 60 L Packaging instructions: 856</p> <p>Limited Quantities - Passenger Aircraft Quantity limitation: 1 L Packaging instructions: Y 841</p>

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.

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU Regulation (EC) No. 1907/2006 (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.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

SECTION 15: Regulatory information

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

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

Europe inventory : All components are listed or exempted.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

References : EH40/2005 Workplace exposure limits
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2016/918

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

CN code : 3814 00 90

International lists

National inventory

Australia : All components are listed or exempted.
Canada : All components are listed or exempted.
China : All components are listed or exempted.
Japan : **Japan inventory (ENCS)**: All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.
Malaysia : All components are listed or exempted.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.
Taiwan : All components are listed or exempted.
Turkey : All components are listed or exempted.
United States : All components are listed or exempted.
Thailand : Not determined.
Viet Nam : Not determined.

SECTION 15: Regulatory information

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- 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
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Acute Tox. 4, H302	Expert judgment
Acute Tox. 4, H332	Expert judgment
Skin Corr. 1B, H314	Expert judgment
Eye Dam. 1, H318	Expert judgment
STOT SE 3, H335	Expert judgment

Full text of H-phrases referred to in sections 2 and 3

Full text of abbreviated H statements :	H225 H302 H312 H314 H318 H319 H332 H335 H336 H412	Highly flammable liquid and vapour. Harmful if swallowed. Harmful in contact with skin. Causes severe skin burns and eye damage. Causes serious eye damage. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. Harmful to aquatic life with long lasting effects.
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Full text of classifications [CLP/GHS] :	Acute Tox. 4, H302 Acute Tox. 4, H312 Acute Tox. 4, H332 Aquatic Chronic 3, H412 Eye Dam. 1, H318 Eye Irrit. 2, H319 Flam. Liq. 2, H225 Skin Corr. 1B, H314 STOT SE 3, H335 STOT SE 3, H336	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE LIQUIDS - Category 2 SKIN CORROSION/IRRITATION - Category 1B SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) - Category 3
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Date of printing : 5/08/2019

Date of issue/ Date of revision : 5/08/2019

Date of previous issue : 18/04/2018

Version : 2.03

Notice to reader

SECTION 16: Other information

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 product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.