


**HR6 Enz-Odours  
C389**

Date of compilation: 22/11/2023      Revised: 24/04/2025      Version: 3 (Replaced 2)

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier:** HR6 Enz-Odours  
C389
- Other means of identification:**  
DXOE02
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses (Professional users): Degreaser  
Relevant uses (Industrial user): Degreaser  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
Arrow Solutions  
Rawdon Road, Moira,  
DE12 6DA, Swadlincote - Derbyshire - United Kingdom  
Phone: 01283 221044  
sales@arrowchem.com  
www.arrowchem.com
- Represented By:  
Authorised Rep Compliance Representing Reabrook Ltd  
Ground Floor  
Lower Baggot Street  
Dublin  
D02 P593  
Ireland  
www.authorisedrepcompliance.com
- 1.4 Emergency telephone number:** For 24/7 multilingual advice for spill, leak, fire, exposure, or accident Call CHEMTREC at +44 20 3885 0382 / +44 20 3807 3798 and provide CCN 1018674; NPIS: 0344 892 0111 (healthcare professionals only) or NHS 111.

**SECTION 2: HAZARDS IDENTIFICATION**

- The product has been classified in accordance with the information contained in the suppliers' SDS and the additional information from tests carried out by said suppliers
- 2.1 Classification of the substance or mixture:**  
**GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):**  
Classification of this product has been carried out in accordance with GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567).  
Flam. Liq. 3: Flammable liquids, Category 3, H226
- 2.2 Label elements:**  
**GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):**  
Warning
- 
- Hazard statements:**  
Flam. Liq. 3: H226 - Flammable liquid and vapour.
- Precautionary statements:**  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P280: Wear protective gloves.  
P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment
- 2.3 Other hazards:**  
Product does not meet PBT/vPvB criteria

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

- 3.1 Substance:**

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)**

Not available

**3.2 Mixture:**

**Chemical description:** Mixture of substances

**Components:**

In accordance with Annex II of The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 67-63-0 EC: 200-661-7 REACH: 01-2119457558-25-XXXX	<b>propan-2-ol</b> Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336 - Danger	<b>3 - &lt;10 %</b>
CAS: 9014-01-1 EC: 232-752-2 REACH: 01-2119480434-38-XXXX	<b>Subtilisin</b> Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 2: H411; Eye Dam. 1: H318; Resp. Sens. 1: H334; Skin Irrit. 2: H315; STOT SE 3: H335 - Danger	<b>&lt;1 %</b>

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

Identification	Acute toxicity		Genus
Subtilisin CAS: 9014-01-1 EC: 232-752-2	LD50 oral	1800 mg/kg	Rat
	LD50 dermal	Not available	
	LC50 inhalation vapour	Not available	

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

**By skin contact:**

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

**By eye contact:**

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Not relevant

**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media:**

**Suitable extinguishing media:**

Foam extinguisher (AB), Dry Chemical Powder (ABC) Fire Extinguisher, Carbon dioxide extinguisher (BC)

**Unsuitable extinguishing media:**

Water jet

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## SECTION 5: FIREFIGHTING MEASURES (continued)

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

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

### 5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and Self Contained Breathing Apparatus. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...)

#### Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

#### For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

#### For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

### 6.2 Environmental precautions:

It is recommended to avoid environmental spillage of both the product and its container.

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

It is recommended:

Prevent the entrance of product in drains, sewers or watercourses. Absorb the spill using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. Collect the product in appropriate containers and manage it according to current legislation.

Spillages in water or sea:

Small spillages:

Contain spillage using barriers or similar equipment. Use suitable absorbents for collection and treat the waste in accordance with current regulations.

Large spillages:

If possible, contain spillage in open water using barriers or similar equipment. If this is not possible, try to control its spread and collect the product with suitable mechanical means. Always consult experts before using dispersants and make sure you have the necessary approvals if they are to be used. Treat the waste according to current regulations.

### 6.4 Reference to other sections:

See sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

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**SECTION 7: HANDLING AND STORAGE (continued)**

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in The Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations 2016 and with the minimum requirements for protecting the security and health of workers under the selection criteria of The Dangerous Substances and Explosive Atmospheres Regulations 2002, 2002 No. 2776. Consult section 10 for conditions and materials that should be avoided.

**C.- Technical recommendations on general occupational hygiene**

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

**D.- Technical recommendations to prevent environmental risks**

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

**7.2 Conditions for safe storage, including any incompatibilities:**

**A.- Specific storage requirements**

Minimum Temp.: 4 °C

Maximum Temp.: 40 °C

**B.- General conditions for storage**

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be assessed in the workplace:

EH40/2005 Workplace exposure limits, fourth edition, published 2020:

Identification		Occupational exposure limits		
Subtilisin CAS: 9014-01-1	WEL (8h)			0.00004 mg/m <sup>3</sup>
	WEL (15 min)			
propan-2-ol CAS: 67-63-0	WEL (8h)	400 ppm		999 mg/m <sup>3</sup>
	WEL (15 min)	500 ppm		1250 mg/m <sup>3</sup>

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	Not relevant	Not relevant	Not relevant	Not relevant
	Dermal	Not relevant	Not relevant	888 mg/kg	Not relevant
	Inhalation	1000 mg/m <sup>3</sup>	Not relevant	500 mg/m <sup>3</sup>	Not relevant

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
propan-2-ol CAS: 67-63-0 EC: 200-661-7	Oral	51 mg/kg	Not relevant	26 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	319 mg/kg	Not relevant
	Inhalation	178 mg/m <sup>3</sup>	Not relevant	114 mg/m <sup>3</sup>	Not relevant
Subtilisin CAS: 9014-01-1 EC: 232-752-2	Oral	3.6 mg/kg	Not relevant	1.8 mg/kg	Not relevant
	Dermal	Not relevant	Not relevant	Not relevant	Not relevant
	Inhalation	Not relevant	Not relevant	Not relevant	Not relevant

**PNEC:**

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**


Identification				
propan-2-ol CAS: 67-63-0 EC: 200-661-7	STP	2251 mg/L	Fresh water	140.9 mg/L
	Soil	28 mg/kg	Marine water	140.9 mg/L
	Intermittent	140.9 mg/L	Sediment (Fresh water)	552 mg/kg
	Oral	0.16 g/kg	Sediment (Marine water)	552 mg/kg
Subtilisin CAS: 9014-01-1 EC: 232-752-2	STP	65 mg/L	Fresh water	0.0017 mg/L
	Soil	0.568 mg/kg	Marine water	0.00017 mg/L
	Intermittent	0.0009 mg/L	Sediment (Fresh water)	Not relevant
	Oral	Not relevant	Sediment (Marine water)	Not relevant

**8.2 Exposure controls:**



**A.- Individual protection measures, such as personal protective equipment**

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<UKCA marking>> or <<CE marking>>. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

**B.- Respiratory protection**


Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases, vapours and particles (Filter type: A2, FFP2)	Replace when an increase in resistance to breathing is observed and/or a smell or taste of the contaminant is detected.

**C.- Specific protection for the hands**


Pictogram	PPE	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Latex (natural rubber), Breakthrough time: > 480 min, Thickness: 0.062 mm, Conditions of use: Splashing)	Replace the gloves at any sign of deterioration.
 Mandatory hand protection	Chemical protective gloves (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.062 mm, Conditions of use: Splashing)	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

**D.- Eye and face protection**

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

**E.- Body protection**

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
 Mandatory foot protection	Safety footwear with antistatic and heat resistant properties	Replace boots at any sign of deterioration.

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

It is advised to implement additional emergency equipments in workplaces that are particularly exposed to the product or in situations where risk assessments highlight the necessity of such equipments.

**Environmental exposure controls:**

To comply with environmental protection regulations, it is recommended to prevent any spillage of the product and its container. For more detailed information, please refer to subsection 7.1.D.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties:**

**Appearance:**

Physical state at 20 °C:	Liquid
Appearance:	Translucent
Colour:	Beige
Odour:	Scented
Odour threshold:	Not relevant *

**Volatility:**

Boiling point at atmospheric pressure:	99 °C
Vapour pressure at 20 °C:	2391 Pa
Vapour pressure at 50 °C:	12577.65 Pa (12.58 kPa)
Evaporation rate at 20 °C:	Not relevant *

**Product description:**

Density at 20 °C:	Not relevant *
Relative density at 20 °C:	0.993
Dynamic viscosity at 20 °C:	1.04 mPa·s
Kinematic viscosity at 20 °C:	1.02 mm <sup>2</sup> /s
Kinematic viscosity at 40 °C:	Not relevant *
Concentration:	Not relevant *
pH:	6 - 9 (at 100 %)
Vapour density at 20 °C:	Not relevant *
Partition coefficient n-octanol/water 20 °C:	Not relevant *
Solubility in water at 20 °C:	Not relevant *
Solubility properties:	Soluble
Decomposition temperature:	Not relevant *
Melting point/freezing point:	Not relevant *

**Flammability:**

Flash Point:	52 °C
Flammability (solid, gas):	Not relevant *
Autoignition temperature:	220 °C
Lower flammability limit:	Not relevant *
Upper flammability limit:	Not relevant *

**Particle characteristics:**

Median equivalent diameter:	Not relevant *
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**9.2 Other information:**

**Information with regard to physical hazard classes:**

Explosive properties:	Not relevant *
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\*Not relevant due to the nature of the product, not providing information property of its hazards.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

Oxidising properties:	Not relevant *
Corrosive to metals:	Not relevant *
Heat of combustion:	Not relevant *
Aerosols-total percentage (by mass) of flammable components:	Not relevant *
<b>Other safety characteristics:</b>	
Surface tension at 20 °C:	Not relevant *
Refraction index:	Not relevant *

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

**10.2 Chemical stability:**

Chemically stable under the indicated conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

The product has been classified in accordance with the information contained in the suppliers' SDS and the additional information from tests carried out by said suppliers

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

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**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

**C- Contact with the skin and the eyes (acute effect):**

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

**D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):**

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**E- Sensitizing effects:**

- Respiratory: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**F- Specific target organ toxicity (STOT) - single exposure:**

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

**G- Specific target organ toxicity (STOT)-repeated exposure:**

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**H- Aspiration hazard:**

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**Other information:**

Not relevant

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
propan-2-ol CAS: 67-63-0 EC: 200-661-7	LD50 oral	>5840 mg/kg	Rat
	LD50 dermal	>13900 mg/kg	Rabbit
	LC50 inhalation vapour	>25 mg/L (6 h)	Rat
Subtilisin CAS: 9014-01-1 EC: 232-752-2	LD50 oral	1800 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	
	LC50 inhalation gases	>20000 mg/L	
	LC50 inhalation vapour	>20 mg/L	
	LC50 inhalation dust	>5 mg/L	
	LC50 inhalation mist	>5 mg/L	

**Acute Toxicity Estimate (ATE mix):**

ATE mix		Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	0 %
Dermal	>2000 mg/kg (Calculation method)	0 %
LC50 inhalation vapour	>20 mg/L (4 h) (Calculation method)	0 %

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

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**SECTION 12: ECOLOGICAL INFORMATION (continued)**

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

The product has been classified in accordance with the information contained in the suppliers' SDS and the additional information from tests carried out by said suppliers

**12.1 Toxicity:**

**Acute toxicity:**

Identification	Concentration	Species	Genus
propan-2-ol CAS: 67-63-0	LC50 9640 mg/L (96 h)	Pimephales promelas	Fish
	EC50 10000 mg/L (24 h)	Daphnia magna	Crustacean
	EC50 Not relevant		
Subtilisin CAS: 9014-01-1	LC50 15 mg/L (96 h)	Oncorhynchus mykiss	Fish
	EC50 0.9 mg/L (48 h)	Daphnia magna	Crustacean
	EC50 0.51 mg/L (72 h)	Pseudokirchneriella subcapitata	Algae

**Chronic toxicity:**

Identification	Concentration	Species	Genus
Subtilisin CAS: 9014-01-1	NOEC 0.042 mg/L	Pimephales promelas	Fish
	NOEC 0.019 mg/L	Daphnia magna	Crustacean

**12.2 Persistence and degradability:**

**Substance-specific information:**

Identification	Degradability	Biodegradability
propan-2-ol CAS: 67-63-0 EC: 200-661-7	BOD5 1.19 g O2/g	Concentration 100 mg/L
	COD 2.23 g O2/g	Period 14 days
	BOD5/COD 0.53	% Biodegradable 86 %
Subtilisin CAS: 9014-01-1 EC: 232-752-2	BOD5 Not relevant	Concentration 10 mg/L
	COD Not relevant	Period 29 days
	BOD5/COD Not relevant	% Biodegradable 100 %

**12.3 Bioaccumulative potential:**

**Substance-specific information:**

Identification	Bioaccumulation potential
propan-2-ol CAS: 67-63-0 EC: 200-661-7	BCF 3
	Pow Log 0.05
	Potential Low

**12.4 Mobility in soil:**

Identification	Absorption/desorption	Volatility
propan-2-ol CAS: 67-63-0	Koc 1.5	Henry 8.207E-1 Pa·m <sup>3</sup> /mol
	Conclusion Very High	Dry soil Yes
	Surface tension 2.24E-2 N/m (25 °C)	Moist soil Yes

**12.5 Results of PBT and vPvB assessment:**

Product does not meet PBT/vPvB criteria

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

Code	Description	Waste class
20 01 29*	detergents containing hazardous substances	Hazardous

**Type of waste:**

HP3 Flammable

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**SECTION 13: DISPOSAL CONSIDERATIONS (continued)**

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance The Waste (England & Wales) Regulations 2011, 2011 No. 988. As under 15 01 of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of UK REACH the provisions related to waste management are stated:

UK legislation: The Waste (England & Wales) Regulations 2011.

**SECTION 14: TRANSPORT INFORMATION**

**Transport of dangerous goods by land:**

With regard to ADR 2023 and RID 2023:



<b>14.1 UN number:</b>	UN1993
<b>14.2 UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S. (propan-2-ol)
<b>14.3 Transport hazard class(es):</b>	3
Labels:	3
<b>14.4 Packing group:</b>	III
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Tunnel restriction code:	D/E
Physico-Chemical properties:	see section 9
Limited quantities:	5 L
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b>	Not relevant

**Transport of dangerous goods by sea:**

With regard to IMDG 41-22:



<b>14.1 UN number:</b>	UN1993
<b>14.2 UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S. (propan-2-ol)
<b>14.3 Transport hazard class(es):</b>	3
Labels:	3
<b>14.4 Packing group:</b>	III
<b>14.5 Marine pollutant:</b>	No
<b>14.6 Special precautions for user</b>	
Special regulations:	274, 223, 955
EmS Codes:	F-E, S-E
Physico-Chemical properties:	see section 9
Limited quantities:	5 L
Segregation group:	Not relevant
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b>	Not relevant

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2025:

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**SECTION 14: TRANSPORT INFORMATION (continued)**



<b>14.1 UN number:</b>	UN1993
<b>14.2 UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S. (propan-2-ol)
<b>14.3 Transport hazard class(es):</b>	3
Labels:	3
<b>14.4 Packing group:</b>	III
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Physico-Chemical properties:	see section 9
<b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:</b>	Not relevant

**SECTION 15: REGULATORY INFORMATION**

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

- Substances listed in UK candidate list of substances of very high concern (SVHCs): Not relevant
- Substances listed in UK REACH Authorisation List (Annex 14): Not relevant

**Restrictions to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK REACH, etc ....):**

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.

Control of Substances Hazardous to Health Regulations 2002 (as amended)

EH40/2005 Workplace exposure limits.

COSHH-SR24 Storing chemical products (small scale).

COSHH-SR2 Diluting chemical concentrates.

COSHH-SR4 Manual cleaning and disinfecting surfaces.

The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019: SCHEDULE 34 - Amendment of Regulation (EC) No 1223/2009 and related amendments.

The Detergents (Amendment) (EU Exit) Regulations 2020.

**SECTION 16: OTHER INFORMATION**

**Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with ANNEX II-The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

**Texts of the legislative phrases mentioned in section 2:**

H226: Flammable liquid and vapour.

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):**

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**SECTION 16: OTHER INFORMATION (continued)**

Acute Tox. 4: H302 - Harmful if swallowed.  
Aquatic Acute 1: H400 - Very toxic to aquatic life.  
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.  
Eye Dam. 1: H318 - Causes serious eye damage.  
Eye Irrit. 2: H319 - Causes serious eye irritation.  
Flam. Liq. 2: H225 - Highly flammable liquid and vapour.  
Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
Skin Irrit. 2: H315 - Causes skin irritation.  
STOT SE 3: H335 - May cause respiratory irritation.  
STOT SE 3: H336 - May cause drowsiness or dizziness.

**Classification procedure:**

Flam. Liq. 3: Calculation method (2.6.4.3)

**Advice related to training:**

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
LogPOW: Octanolwater partition coefficient  
Koc: Partition coefficient of organic carbon  
UFI: unique formula identifier  
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at UK, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -