

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

- 1.1 Product identifier:** Tufstuf
C506
- Other means of identification:**
TUF024/07
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
Relevant uses: cosmetic. For professional users/industrial user only.
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
- 1.4 Emergency telephone number:** NPIS: 0844 892 0111 (healthcare professionals only) or NHS 111. +44 (0) 777 8505 330 (24 hrs)

SECTION 2: HAZARDS IDENTIFICATION

- 2.1 Classification of the substance or mixture:**
GB CLP Regulation:
The product is not classified as hazardous according to GB CLP Regulation.
- 2.2 Label elements:**
This Regulation shall not apply to substances and mixtures in the following forms, which are in the finished state, intended for the final user: cosmetic products.
GB CLP Regulation:
Hazard statements:
Non-applicable
Precautionary statements:
Non-applicable
Supplementary information:
EUH210: Safety data sheet available on request.
- 2.3 Other hazards:**
Product does not meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**
Non-applicable
- 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: 24938-91-8	Polyoxyethylene tridecyl ether (C13,8 EO) Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger	3 - <10 %
CAS: 68155-07-7	Amides, C8-18 and C18-unsatd., N,N-bis(hydroxyethyl) Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	3 - <10 %
CAS: 141-43-5	2-aminoethanol Acute Tox. 4: H302+H312+H332; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; STOT SE 3: H335 - Danger	1 - <3 %

- CONTINUED ON NEXT PAGE -

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification	Concentration
CAS: 68891-38-3	Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts Aquatic Chronic 3: H412; Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger	1 - <3 %
CAS: 157627-86-6	Alcohols, C13-15, branched and linear, ethoxylated Acute Tox. 4: H302; Aquatic Chronic 3: H412; Eye Dam. 1: H318 - Danger	1 - <3 %
CAS: 7320-34-5	Tetrapotassium pyrophosphate Eye Irrit. 2: H319 - Warning	1 - <3 %
CAS: 56-81-5	Glycerol	<1 %
CAS: 84-66-2	Diethyl phthalate	<1 %
CAS: 57-55-6	Propane-1,2-diol (Vp > 0.01 kPa 20 °C)	<1 %
CAS: 1310-73-2	sodium hydroxide Eye Dam. 1: H318; Met. Corr. 1: H290; Skin Corr. 1A: H314 - Danger	<1 %

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
	LD50 oral	LD50 dermal	
Polyoxyethylene tridecyl ether (C13,8 EO) CAS: 24938-91-8	500 mg/kg (ATEi)	Non-applicable	
	Non-applicable	Non-applicable	
	Non-applicable	Non-applicable	
Alcohols, C13-15, branched and linear, ethoxylated CAS: 157627-86-6	500 mg/kg (ATEi)	Non-applicable	
	Non-applicable	Non-applicable	
	Non-applicable	Non-applicable	

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:

In case the skin is affected (stinging, redness, rashes, blisters,...), seek medical help with this Safety Data Form.

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:

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

- CONTINUED ON NEXT PAGE -

SECTION 5: FIREFIGHTING MEASURES (continued)

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

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 (SCBA). 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. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

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:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

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 with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

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

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on 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.- Technical measures for storage

Minimum Temp.: 4 °C

Maximum Temp.: 40 °C

- CONTINUED ON NEXT PAGE -

SECTION 7: HANDLING AND STORAGE (continued)

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 monitored in the workplace:

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

Identification	Occupational exposure limits		
	WEL (8h)		
sodium hydroxide CAS: 1310-73-2	WEL (8h)		
	WEL (15 min)		2 mg/m ³
2-aminoethanol CAS: 141-43-5	WEL (8h)	1 ppm	2.5 mg/m ³
	WEL (15 min)	3 ppm	7.6 mg/m ³
Glycerol CAS: 56-81-5	WEL (8h)		10 mg/m ³
	WEL (15 min)		
Diethyl phthalate CAS: 84-66-2	WEL (8h)		5 mg/m ³
	WEL (15 min)		10 mg/m ³
Propane-1,2-diol (Vp > 0.01 kPa 20 °C) CAS: 57-55-6	WEL (8h)	150 ppm	474 mg/m ³
	WEL (15 min)		

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	3 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1 mg/m ³	0.51 mg/m ³
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3 EC: 500-234-8	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	2750 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	175 mg/m ³	Non-applicable
Tetrapotassium pyrophosphate CAS: 7320-34-5 EC: 230-785-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	17.63 mg/m ³	Non-applicable
Glycerol CAS: 56-81-5 EC: 200-289-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	56 mg/m ³
Diethyl phthalate CAS: 84-66-2 EC: 201-550-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	15 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	10.56 mg/m ³	Non-applicable
Propane-1,2-diol (Vp > 0.01 kPa 20 °C) CAS: 57-55-6 EC: 200-338-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	168 mg/m ³	10 mg/m ³
sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m ³

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	Oral	Non-applicable	Non-applicable	1.5 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1.5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0.18 mg/m ³	0.28 mg/m ³

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3 EC: 500-234-8	Oral	Non-applicable	Non-applicable	15 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1650 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	52 mg/m ³	Non-applicable
Tetrapotassium pyrophosphate CAS: 7320-34-5 EC: 230-785-7	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	4.35 mg/m ³	Non-applicable
Glycerol CAS: 56-81-5 EC: 200-289-5	Oral	Non-applicable	Non-applicable	229 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	33 mg/m ³
Diethyl phthalate CAS: 84-66-2 EC: 201-550-6	Oral	Non-applicable	Non-applicable	0.75 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	7.5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	2.6 mg/m ³	Non-applicable
Propane-1,2-diol (Vp > 0.01 kPa 20 °C) CAS: 57-55-6 EC: 200-338-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	50 mg/m ³	10 mg/m ³
sodium hydroxide CAS: 1310-73-2 EC: 215-185-5	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Inhalation	Non-applicable	Non-applicable	Non-applicable	1 mg/m ³

PNEC:

Identification				
2-aminoethanol CAS: 141-43-5 EC: 205-483-3	STP	100 mg/L	Fresh water	0.07 mg/L
	Soil	1.29 mg/kg	Marine water	0.007 mg/L
	Intermittent	0.028 mg/L	Sediment (Fresh water)	0.357 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.036 mg/kg
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3 EC: 500-234-8	STP	10000 mg/L	Fresh water	0.24 mg/L
	Soil	7.5 mg/kg	Marine water	0.024 mg/L
	Intermittent	0.071 mg/L	Sediment (Fresh water)	0.917 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.092 mg/kg
Glycerol CAS: 56-81-5 EC: 200-289-5	STP	1000 mg/L	Fresh water	0.885 mg/L
	Soil	0.141 mg/kg	Marine water	0.088 mg/L
	Intermittent	8.85 mg/L	Sediment (Fresh water)	3.3 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.33 mg/kg
Diethyl phthalate CAS: 84-66-2 EC: 201-550-6	STP	2 mg/L	Fresh water	0.012 mg/L
	Soil	0.137 mg/kg	Marine water	0.0012 mg/L
	Intermittent	0.12 mg/L	Sediment (Fresh water)	0.137 mg/kg
	Oral	0.033 g/kg	Sediment (Marine water)	0.0137 mg/kg
Propane-1,2-diol (Vp > 0.01 kPa 20 °C) CAS: 57-55-6 EC: 200-338-0	STP	20000 mg/L	Fresh water	260 mg/L
	Soil	50 mg/kg	Marine water	26 mg/L
	Intermittent	183 mg/L	Sediment (Fresh water)	572 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	57.2 mg/kg

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>>. 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

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands


- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Pictogram	PPE	Remarks
 Mandatory hand protection	Protective gloves against minor risks (Material: Nitrile, Breakthrough time: > 480 min, Thickness: 0.062 mm, Conditions of use: Normal)	Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN ISO 21420:2020 and EN ISO 374-1:2016+A1:2018

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.
	Anti-slip work shoes	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 20345:2012 y EN 13832-1:2007

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see 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: Transparent
 Colour: Pink
 Odour: Scented
 Odour threshold: Non-applicable *

Volatility:

Boiling point at atmospheric pressure: 101 °C
 Vapour pressure at 20 °C: 2331 Pa
 Vapour pressure at 50 °C: 12280.95 Pa (12.28 kPa)
 Evaporation rate at 20 °C: Non-applicable *

Product description:

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

- CONTINUED ON NEXT PAGE -

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Density at 20 °C:	Non-applicable *
Relative density at 20 °C:	1.016
Dynamic viscosity at 20 °C:	200 - 700 cP
Kinematic viscosity at 20 °C:	Non-applicable *
Kinematic viscosity at 40 °C:	Non-applicable *
Concentration:	Non-applicable *
pH:	9.7 - 10.2 (at 100 %)
Vapour density at 20 °C:	Non-applicable *
Partition coefficient n-octanol/water 20 °C:	Non-applicable *
Solubility in water at 20 °C:	Non-applicable *
Solubility properties:	Soluble
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Flammability:	
Flash Point:	Non Flammable (>60 °C)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	220 °C
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *
Particle characteristics:	
Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *
Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *

Other safety characteristics:

Surface tension at 20 °C:	Non-applicable *
Refraction index:	Non-applicable *

*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	Not applicable	Not applicable	Not applicable

- CONTINUED ON NEXT PAGE -

SECTION 10: STABILITY AND REACTIVITY (continued)

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Precaution	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 (CO₂), 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

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. However, it contains 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 does contain substances classified as hazardous for this effect. For more information see section 3.

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, as it does not contain substances classified as hazardous 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.

- CONTINUED ON NEXT PAGE -

SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
	Route	Dose/Concentration	
2-aminoethanol CAS: 141-43-5	LD50 oral	1515 mg/kg	Rat
	LD50 dermal	2504 mg/kg	Rabbit
	LC50 inhalation	11 mg/L (4 h)	Rat
Tetrapotassium pyrophosphate CAS: 7320-34-5	LD50 oral	Non-applicable	
	LD50 dermal	4640 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
Polyoxyethylene tridecyl ether (C13,8 EO) CAS: 24938-91-8	LD50 oral	500 mg/kg (ATEi)	
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Alcohols, C13-15, branched and linear, ethoxylated CAS: 157627-86-6	LD50 oral	500 mg/kg (ATEi)	
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Amides, C8-18 and C18-unsatd., N,N-bis(hydroxyethyl) CAS: 68155-07-7	LD50 oral	>5000 mg/kg	Rat
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	
Glycerol CAS: 56-81-5	LD50 oral	27200 mg/kg	Rat
	LD50 dermal	>2000 mg/kg	Guinean pig
	LC50 inhalation	>5.85 mg/L (6 h)	Rat
sodium hydroxide CAS: 1310-73-2	LD50 oral	>2000 mg/kg	
	LD50 dermal	Non-applicable	
	LC50 inhalation	Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

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

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.

12.1 Toxicity:

Acute toxicity:

Identification	Concentration		Species	Genus
	Test Type	Dose/Concentration		
Amides, C8-18 and C18-unsatd., N,N-bis(hydroxyethyl) CAS: 68155-07-7	LC50	>1 - 10 mg/L (96 h)		Fish
	EC50	>1 - 10 mg/L (48 h)		Crustacean
	EC50	>1 - 10 mg/L (72 h)		Algae
2-aminoethanol CAS: 141-43-5	LC50	349 mg/L (96 h)	Cyprinus carpio	Fish
	EC50	65 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	22 mg/L (72 h)	Scenedesmus subspicatus	Algae
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3	LC50	7.1 mg/L (96 h)	Danio rerio	Fish
	EC50	7.4 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	27 mg/L (72 h)	Scenedesmus subspicatus	Algae
Alcohols, C13-15, branched and linear, ethoxylated CAS: 157627-86-6	LC50	>10 - 100 mg/L (96 h)		Fish
	EC50	>10 - 100 mg/L (48 h)		Crustacean
	EC50	>10 - 100 mg/L (72 h)		Algae
Diethyl phthalate CAS: 84-66-2	LC50	61 mg/L (48 h)	Leuciscus idus	Fish
	EC50	52 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		

- CONTINUED ON NEXT PAGE -

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
sodium hydroxide CAS: 1310-73-2	LC50	189 mg/L (48 h)	Leuciscus idus	Fish
	EC50	33 mg/L	Crangon crangon	Crustacean
	EC50	Non-applicable		

Chronic toxicity:

Identification	Concentration		Species	Genus
Amides, C8-18 and C18-unsatd., N,N-bis(hydroxyethyl) CAS: 68155-07-7	NOEC	0.07 mg/L	Daphnia magna	Crustacean
	NOEC	Non-applicable		
2-aminoethanol CAS: 141-43-5	NOEC	1.24 mg/L	Oryzias latipes	Fish
	NOEC	0.85 mg/L	Daphnia magna	Crustacean
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3	NOEC	0.2 mg/L	Oncorhynchus mykiss	Fish
	NOEC	0.27 mg/L	Daphnia magna	Crustacean
Diethyl phthalate CAS: 84-66-2	NOEC	5 mg/L	Cyprinus carpio	Fish
	NOEC	25 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
2-aminoethanol CAS: 141-43-5	BOD5	Non-applicable	Concentration	20 mg/L
	COD	Non-applicable	Period	21 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %
Alcohols, C12-14(even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts CAS: 68891-38-3	BOD5	Non-applicable	Concentration	10.5 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	100 %
Glycerol CAS: 56-81-5	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	63 %
Diethyl phthalate CAS: 84-66-2	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	88 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
2-aminoethanol CAS: 141-43-5	BCF	3
	Pow Log	-1.31
	Potential	Low
Glycerol CAS: 56-81-5	BCF	3
	Pow Log	-1.76
	Potential	Low
Diethyl phthalate CAS: 84-66-2	BCF	117
	Pow Log	2.07
	Potential	High

12.4 Mobility in soil:

Identification	Absorption/desorption		Volatility	
2-aminoethanol CAS: 141-43-5	Koc	0.27	Henry	3.7E-5 Pa·m ³ /mol
	Conclusion	Very High	Dry soil	No
	Surface tension	5.025E-2 N/m (25 °C)	Moist soil	No
Glycerol CAS: 56-81-5	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	6.516E-2 N/m (25 °C)	Moist soil	Non-applicable

- CONTINUED ON NEXT PAGE -

SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Absorption/desorption		Volatility	
Diethyl phthalate CAS: 84-66-2	Koc	Non-applicable	Henry	6.181E-2 Pa·m ³ /mol
	Conclusion	Non-applicable	Dry soil	No
	Surface tension	3.699E-2 N/m (25 °C)	Moist soil	No
Propane-1,2-diol (Vp > 0.01 kPa 20 °C) CAS: 57-55-6	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	3.547E-2 N/m (25 °C)	Moist soil	Non-applicable

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:

Type of waste:

HP4 Irritant — skin irritation and eye damage

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance The Waste 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-dangerous 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 Regulations 2011.

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

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): Non-applicable
- Substances listed in UK REACH Authorisation List (Annex 14): Non-applicable

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

Non-applicable

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.

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.

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)**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:

Acute Tox. 4: H302 - Harmful if swallowed.
Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Met. Corr. 1: H290 - May be corrosive to metals.
Skin Corr. 1A: H314 - Causes severe skin burns and eye damage.
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.
Skin Irrit. 2: H315 - Causes skin irritation.
STOT SE 3: H335 - May cause respiratory irritation.

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