



Safety Data Sheet

According to Annex II to REACH - Regulation 2020/878

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

1.1. Product identifier

Code: **U01310**
Product name **PERFORMA DUE DUE**

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

Intended use **Emulsifiable metalworking fluid mechanical machining.**
Uses advised against: **Different uses than those intended.**

1.3. Details of the supplier of the safety data sheet

Name **CENTRO DISTRIBUZIONE UTENSILI SCPA**
Full address **Via delle Gerole, 19**
District and Country **20867 CAPONAGO (MB)**
ITALY
tel. +39 02 95746081
fax. + 39 02 95745182

e-mail address of the competent person

responsible for the Safety Data Sheet Supplier: **info@cdu.net**
CENTRO DISTRIBUZIONE UTENSILI SCPA

1.4. Emergency telephone number

For urgent inquiries refer to **.....**
CENTRO DISTRIBUZIONE UTENSILI SCPA
+39 02 95746081 (Technical support - Office hour 8.30-13.00 – 14.00-17.30)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Eye irritation, category 2	H319	Causes serious eye irritation.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:

Signal words: **WARNING**

Hazard statements:

H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.



Precautionary statements:

P280 Wear eye protection / face protection.
P337+P313 If eye irritation persists: Get medical advice / attention.
P273 Avoid release to the environment.

2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.
The product does not contain substances with endocrine disrupting properties in concentration \geq 0.1%.

SECTION 3. Composition/information on ingredients**3.2. Mixtures**

Contains:

Identification	X = Conc. %	Classification 1272/2008 (CLP)
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DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

CAS 64742-53-6	$44 \leq x < 54$	Asp. Tox. 1 H304, Classification note according to Annex VI to the CLP Regulation: L. Substance with extract content in DMSO of less than 3% by weight, determined using the IP 346 method.
EC 265-156-6		
INDEX 649-466-00-2		
REACH Reg. 01-2119480375-34		

SULFONIC ACIDS, PETROLEUM, SODIUM SALTS

CAS 68608-26-4	$5,00 \leq x \leq 8,01$	Eye Irrit. 2 H319
EC 271-781-5		
INDEX -		
REACH Reg. 01-2119527859-22		

2-METHYLPENTANE-2,4-DIOL

CAS 107-41-5	$2,50 \leq x < 3,79$	Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC 203-489-0		
INDEX 603-053-00-3		
REACH Reg. 01-2119539582-35		

2-(2-BUTOXYETHOXY)ETHANOL

CAS 112-34-5	$0,80 \leq x \leq 1,80$	Eye Irrit. 2 H319
EC 203-961-6		
INDEX 603-096-00-8		
REACH Reg. 01-2119475104-44		

ALCOHOLS, C12-14, ETHOXYLATED, CARBOXYMETHYLATED

CAS 220622-96-8	$0,30 \leq x < 1,30$	Eye Dam. 1 H318
EC 931-957-0		
INDEX -		
REACH Reg. polymer		

(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE

CAS 110-25-8	$0,50 \leq x < 0,77$	Acute Tox. 4 H332, Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1 ATE Inhalation vapours: 11 mg/l
EC 203-749-3		
INDEX -		
REACH Reg. 01-2119488991-20		

ETHYLENE GLYCOL

CAS 107-21-1	$0,10 \leq x \leq 0,124$	Acute Tox. 4 H302, STOT RE 2 H373
EC 203-473-3		LD50 Oral: >1600 mg/kg
INDEX 603-027-00-1		



REACH Reg. 01-2119456816-28

PYRIDINE-2-THIOL 1-OXIDE, SODIUM SALT

CAS 3811-73-2

0,025 ≤ x ≤ 0,049

Acute Tox. 3 H311, Acute Tox. 4 H302, Acute Tox. 4 H332, Eye Irrit. 2 H319,
Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410
M=10

EC 223-296-5

INDEX -

ATE Oral: 1250 mg/kg, ATE Dermal: 300 mg/kg, ATE Inhalation
mists/powders: 1,25 mg/l/4h

REACH Reg. biocide

Note L: The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3% DMSO extract as measured by IP 346.

The full wording of hazard (H) phrases is given in section 16 of the sheet.

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

EYES: remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

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

Specific information on symptoms and effects caused by the product are unknown.

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

Information for the doctor: symptomatically treatment.

SECTION 5. Firefighting measures**5.1. Extinguishing media**

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.



6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

Storage class TRGS 510 (Germany): 10

7.3. Specific end use(s)

Emulsifiable metalworking fluid mechanical machining.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

DEU	Deutschland	Technischen Regeln für Gefahrstoffe (TRGS 900) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte. MAK- und BAT-Werte-Liste 2020, Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Mitteilung 56
DNK	Danmark	Bekendtgørelse om grænseværdier for stoffer og materialer - BEK nr 1458 af 13/12/2019
ESP	España	Límites de exposición profesional para agentes químicos en España 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
FIN	Suomi	HTP-VÄRDEN 2020. Koncentrationer som befunnits skadliga. SOCIAL - OCH HÄLSOVÅRDSMINISTERIETS PUBLIKATIONER 2020:25
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Arbeidsomstandighedenregeling. Lijst van wettelijke grenswaarden op grond van de artikelen 4.3, eerste lid, en 4.16, eerste lid, van het Arbeidsomstandighedenbesluit
PRT	Portugal	Decreto-Lei n.º 1/2021 de 6 de janeiro, valores-limite de exposição profissional indicativos para os agentes químicos. Decreto-Lei n.º 35/2020 de 13 de julho, proteção dos trabalhadores contra os riscos ligados à exposição durante o trabalho a agentes cancerígenos ou mutagénicos
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
ROU	România	Hotărârea nr. 53/2021 pentru modificarea hotărârii guvernului nr. 1.218/2006, precum și pentru modificarea și completarea hotărârii guvernului nr. 1.093/2006
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
EU	OEL EU	Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
	TLV-ACGIH	ACGIH 2020

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation							5,4 mg/m ³	

**2-METHYLPENTANE-2,4-DIOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
MAK	DEU	49	10	98	20	
TLV	DNK			125 (C)	25 (C)	
VLA	ESP			123	25	
VLEP	FRA			125	25	
HTP	FIN	120	25	200	40	
NDS/NDSch	POL	50		100		INHAL
WEL	GBR	123	25	123	25	
TLV-ACGIH			25		50	Note (V) Eye and URT irr
Predicted no-effect concentration - PNEC						
Normal value in fresh water				0,429		mg/l
Normal value in marine water				0,0429		mg/l
Normal value for fresh water sediment				1,59		mg/kg/d
Normal value for marine water sediment				0,159		mg/kg/d
Normal value for water, intermittent release				4,29		mg/l
Normal value of STP microorganisms				20		mg/l
Normal value for the terrestrial compartment				0,066		mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Effects on consumers

Effects on workers

Route of exposure	Effects on consumers			Effects on workers				
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				1,5 mg/kg bw/d				
Inhalation	49 mg/m3			7,8 mg/m3				44,4 mg/m3
Skin				15 mg/kg bw/d				42 mg/kg bw/d

2-(2-BUTOXYETHOXY)ETHANOL**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	67	10	100	15	INHAL aerosol and vapour
MAK	DEU	67	10	100,5	15	Hinweis
TLV	DNK	68	10	20	136	
VLA	ESP	67,5	10	101,2	15	
VLEP	FRA	68	10	101,2	15	
HTP	FIN	68	10			
VLEP	ITA	67,5	10	101,2	15	
TGG	NLD	50		100		SKIN
VLE	PRT	67,5	10	101,2	15	
NDS/NDSch	POL	67		100		



TLV	ROU	67,5	10	101,2	15
WEL	GBR	67,5	10	101,2	15
OEL	EU	67,5	10	101,2	15

Predicted no-effect concentration - PNEC					
Normal value in fresh water				1,1	mg/l
Normal value in marine water				0,11	mg/l
Normal value for fresh water sediment				4,4	mg/kg
Normal value for marine water sediment				0,44	mg/kg
Normal value of STP microorganisms				200	mg/l
Normal value for the terrestrial compartment				0,32	mg/kg

Health - Derived no-effect level - DNEL / DMEL								
Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral				5 mg/kg bw/d				
Inhalation	60,7 mg/m3		40,5 mg/m3	40,5 mg/m3	101,2 mg/m3		67,5 mg/m3	67,5 mg/m3
Skin				50 mg/kg bw/d				83 mg/kg bw/d

(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE

Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	0,05		0,1		INHAL
MAK	DEU	0,05		0,1		INHAL

ETHYLENE GLYCOL

Threshold Limit Value						
Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	26	10	52	20	SKIN
MAK	DEU	26	10	52	20	SKIN
TLV	DNK	26	10			SKIN E
VLA	ESP	52	20	104	40	SKIN
VLEP	FRA	52	20	104	40	SKIN
HTP	FIN	50	20	100	40	SKIN
VLEP	ITA	52	20	104	40	SKIN
VLE	PRT	52	20	104	40	SKIN
NDS/NDSch	POL	15		50		SKIN
TLV	ROU	52	20	104	40	SKIN
WEL	GBR	52	20	104	40	SKIN
OEL	EU	52	20	104	40	SKIN
TLV-ACGIH			25		50	
TLV-ACGIH				10		INHAL
Predicted no-effect concentration - PNEC						
Normal value in fresh water				10		mg/l



Normal value in marine water	1	mg/l
Normal value for fresh water sediment	37	mg/kg
Normal value for marine water sediment	3,7	mg/kg
Normal value for water, intermittent release	10	mg/l
Normal value of STP microorganisms	199,5	mg/l
Normal value for the terrestrial compartment	1,53	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Effects on consumers

Effects on workers

Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			7 mg/m ³				35 mg/m ³	
Skin				53 mg/kg				106 mg/kg

PYRIDINE-2-THIOL 1-OXIDE, SODIUM SALT**Threshold Limit Value**

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m ³	ppm	
AGW	DEU	0,2	0,4	INHAL
MAK	DEU	0,2	0,4	INHAL
TLV	DNK	1	2	SKIN
TLV-ACGIH		0,35		

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.



SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value
Appearance	clear liquid
Colour	amber
Odour	characteristic
Odour threshold	Not available
Melting point / freezing point	Not available
Initial boiling point	> 100 °C
Flammability	Not applicable
Lower explosive limit	Not applicable
Upper explosive limit	Not applicable
Flash point	> 125 °C
Auto-ignition temperature	Not available
Decomposition temperature	Not available
pH	9,20 – 9,60 (Sol. 5%)
Kinematic viscosity	>20,5 mm ² /sec (40°C)
Solubility	emulsifiable in water
Partition coefficient: n-octanol/water	Not available
Vapour pressure	Not available
Density and/or relative density	0,94 – 0,96 kg/l (20°C)
Relative vapour density	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes
Information not available.

9.2.2. Other safety characteristics VOC (Directive 2010/75/EC)	3,84 %
Explosive properties	Not applicable

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

ETHYLENE GLYCOL

In the air absorbs moisture. Decomposes at temperatures above 200°C/392°F.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

ETHYLENE GLYCOL

Risk of explosion on contact with: perchloric acid. May react dangerously with: chlorosulphuric acid, sodium hydroxide, sulphuric acid, phosphorus pentasulphide, chromium (III) oxide, chromyl chloride, potassium perchlorate, potassium dichromate, sodium peroxide, aluminium. Forms explosive



mixtures with: air.

10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

Avoid exposure to: heat, naked flames, direct sunlight, ignition sources.

2-(2-BUTOXYETHOXY)ETHANOL

Avoid exposure to: heat (long period), flames, ignition sources.

ETHYLENE GLYCOL

Avoid exposure to: sources of heat, naked flames.

10.5. Incompatible materials

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

Incompatible with: strong acids, strong bases, oxidising agents.

2-METHYLPENTANE-2,4-DIOL

Avoid contact with: strong oxidising agents, acids.

2-(2-BUTOXYETHOXY)ETHANOL

Incompatible with: strong acids, strong alkalis, strong oxidising agents.

10.6. Hazardous decomposition products

2-METHYLPENTANE-2,4-DIOL

When heated to decomposition releases: carbon oxides, sulphur oxides.

2-(2-BUTOXYETHOXY)ETHANOL

When heated to decomposition releases: carbon oxides.

ETHYLENE GLYCOL

May develop: hydroxyacetaldehyde, glyoxal, acetaldehyde, methane, carbon monoxide, hydrogen.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

Metabolism, toxicokinetics, mechanism of action and other information

Information not available.

Information on likely routes of exposure

2-(2-BUTOXYETHOXY)ETHANOL

WORKERS: inhalation; contact with the skin.

ETHYLENE GLYCOL

WORKERS: inhalation; contact with the skin.

POPULATION: inhalation of ambient air; contact with the skin of products containing the substance.

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

2-(2-BUTOXYETHOXY)ETHANOL

May be absorbed by inhalation, ingestion and skin contact; is irritating for the skin and especially for the eyes. May cause damage to the spleen. At room temperature the danger of inhalation is unlikely, due to the low vapour pressure of the substance.

ETHYLENE GLYCOL

By ingestion it initially stimulates the central nervous system; then a phase of depression takes over. Kidney damage can occur, with anuria and uremia. Symptoms of overexposure are: vomiting, drowsiness, difficulty breathing, convulsions. The lethal dose for humans is approximately 1.4 ml / kg.

Interactive effects

Information not available.

**PERFORMA DUE DUE****ACUTE TOXICITY**

ATE (Inhalation) of the mixture: not classified (no significant component)
ATE (Oral) of the mixture: not classified (no significant component)
ATE (Dermal) of the mixture: not classified (no significant component)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

LD50 (Oral): > 5000 mg/kg Rat (API 1986a)
LD50 (Dermal): > 5000 mg/kg Rabbit (API 1982)
LC50 (Inhalation vapours): > 5,53 mg/l/4h Rat (EMBSI 1988a)

SULFONIC ACIDS, PETROLEUM, SODIUM SALTS

LD50 (Oral): > 2000 mg/kg Rat

2-(2-BUTOXYETHOXY)ETHANOL

LD50 (Oral): 2410 mg/kg dw Male rat (OECD 401)
LD50 (Dermal): 2764 mg/kg dw Rabbit (OECD 402)
LC50 (Inhalation vapours): > 29 mg/l/2h Rat

ALCOHOLS, C12-14, ETHOXYLATED, CARBOXYMETHYLATED

LD50 (Oral): > 2000 mg/kg Rat
LD50 (Dermal): > 2000 mg/kg Rat

(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE

LD50 (Oral): > 5000 mg/kg Rat
LC50 (Inhalation vapours): 1,8 mg/l/4h Rat
ATE (Inhalation vapours): 11 mg/l estimate from table 3.1.2 of Annex I of the CLP
(figure used for calculation of the acute toxicity estimate of the mixture)

ETHYLENE GLYCOL

LD50 (Oral): > 1600 mg/kg Human being
LD50 (Dermal): > 3500 mg/kg Mouse
LC50 (Inhalation vapours): > 2,5 mg/l/6h Rat

PYRIDINE-2-THIOL 1-OXIDE, SODIUM SALT

LD50 (Oral): 1250 mg/kg
LD50 (Dermal): > 5000 mg/kg
STA (Dermal): 300 mg/kg estimate from table 3.1.2 of Annex I of the CLP
(figure used for calculation of the acute toxicity estimate of the mixture)

LC50 (Inhalation mists/powders): 1,25 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class.

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation.

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class.

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class.

ETHYLENE GLYCOL

Available studies have not shown carcinogenic potential. In a 2-year carcinogenicity study conducted by the US National Toxicology Program (NTP), in which ethylene glycol was administered in feed, "no evidence of carcinogenic activity" was observed in male and female B6C3F1 mice. (NTP, 1993).

**REPRODUCTIVE TOXICITY**

Does not meet the classification criteria for this hazard class.

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class.

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class. Viscosity: >20,5 mm²/sec (40°C)

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

SECTION 12. Ecological information

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

12.1. Toxicity**DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC**

LL50 - for Fish	> 100 mg / l / 96h
LL50 - for Crustacea	> 10000 mg / l / 96h
NOEL - for Algae / Aquatic Plants	> 100 mg / l / 72h
NOEL - for Chronic Invertebrates	10 mg / l / 21d

(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE

LC50 - for Fish	> 1 mg/l <i>Leuciscus idus</i>
EC50 - for Crustacea	0,43 mg/l/48h <i>Daphnia magna</i> (OECD 202)
EC50 - for Algae / Aquatic Plants	6,3 mg/l/72h <i>Desmodesmus subspicatus</i>

2-(2-BUTOXYETHOXY)ETHANOL

LC50 - for Fish	1300 mg/l/96h <i>Lepomis macrochirus</i> (OECD 203)
EC50 - for Crustacea	> 100 mg/l/48h <i>Daphnia magna</i> (OECD 202)

ETHYLENE GLYCOL

LC50 - for Fish	72860 mg/l/96h <i>Pimephales promelas</i>
EC50 - for Crustacea	> 100 mg/l/48h <i>Daphnia magna</i>
Chronic NOEC for Fish	15380 mg/l <i>Pimephales promelas</i>
Chronic NOEC for Crustacea	8590 mg/l <i>Ceriodaphnia sp.</i>

2-METHYLPENTANE-2,4-DIOL

LC50 - for Fish	8510 mg/l/96h <i>Gambusia affinis</i>
EC50 - for Algae / Aquatic Plants	429 mg/l/72h <i>Pseudokirchnerella subcapitata</i>

ALCOHOLS, C12-14, ETHOXYLATED, CARBOXYMETHYLATED

LC50 - for Fish	> 1 mg/l/96h
EC50 - for Crustacea	> 1 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 1 mg/l/72h



PYRIDINE-2-THIOL 1-OXIDE, SODIUM SALT

LC50 - for Fish 0,00767 mg/l/96h (OECD 203)

EC50 - for Crustacea 0,022 mg/l/48h (OECD 202)

EC50 - for Algae / Aquatic Plants 0,46 mg/l/72h (OECD 201)

12.2. Persistence and degradability

(Z)-N-METHYL-N-(1-OXO-9-OCTADECENYL)GLYCINE

Rapidly degradable 85% - 28d (OECD 301/B)

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

Solubility in water Insoluble

Entirely degradable

2-(2-BUTOXYETHOXY)ETHANOL

Rapidly degradable 80-93% - 28d (OECD 301C)

ETHYLENE GLYCOL

Solubility in water 1000 -10000 mg/l

Rapidly degradable

2-METHYLPENTANE-2,4-DIOL

Solubility in water > 10000 mg/l

Rapidly degradable

ALCOLI, C12-14, ETOSSILATI, CARBOSSIMETILATI

Rapidly degradable 60% - 28d (OECD TG 301/B)

PYRIDINE-2-THIOL 1-OXIDE, SODIUM SALT

Rapidly degradable

12.3. Bioaccumulative potential

2-(2-BUTOXYETHOXY)ETHANOL

Partition coefficient: n-octanol/water 1 Log Kow

ETHYLENE GLYCOL

Partition coefficient: n-octanol/water -1,36

2-METHYLPENTANE-2,4-DIOL

Partition coefficient: n-octanol/water < -0,14

12.4. Mobility in soil

Information not available.

12.5. Results of PBT and vPvB assessmentOn the basis of available data, the product does not contain any PBT or vPvB in percentage \geq than 0,1%.**12.6. Endocrine disrupting properties**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with



environmental effects under evaluation.

12.7. Other adverse effects

Information not available.

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number or ID number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for user

Not applicable.

14.7. Maritime transport in bulk according to IMO instruments

Information not relevant.

SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point	3
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Regulation (EC) No. 2019/1148 - on the marketing and use of explosives precursors

Not applicable.

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage \geq than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 3: Severe hazard to waters.

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the mixture.

SECTION 16. Other information

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H311	Toxic in contact with skin.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H373	May cause damage to organs through prolonged or repeated exposure.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road



- ATE: Acute Toxicity Estimate
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

Classification and procedure used to derive it in accordance with Regulation (EC) 1272/2008 (CLP) in relation to mixtures:

Classification according to Regulation (EC) No. 1272/2008	Classification procedure
Eye Irrit. 2 H319	Calculation method
Aquatic Chronic 3 H412	Calculation method

GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
 3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
 4. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
 7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
 10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
 13. Regulation (EU) 2017/776 (X Atp. CLP)
 14. Regulation (EU) 2018/669 (XI Atp. CLP)
 15. Regulation (EU) 2019/521 (XII Atp. CLP)
 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
 17. Regulation (EU) 2019/1148
 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- The Merck Index. - 10th Edition
 - Handling Chemical Safety
 - INRS - Fiche Toxicologique (toxicological sheet)
 - Patty - Industrial Hygiene and Toxicology
 - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
 - IFA GESTIS website
 - ECHA website
 - Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 08 / 09 / 10 / 11 / 12 / 15 / 16.