Safety Data Sheet

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

1.1. Product identifier

Code: **U01215**
Product name **PERFORMA 40 E/BD**

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

Intended use **Emulsifiable metalworking fluid for 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 **info@cdu.net**
Product distribution by: **Centro Distribuzione Utensili Scpa**

1.4. Emergency telephone number

For urgent inquiries refer to **+39 02 95746081 during office hours 8.30-12.30 - 13.30-17.30.**

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 2015/830.
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.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
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.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.
EUH208 Contains:
2-METHYL-4-ISOTHIAZOLIN-3-ONE;

1,2-BENZISOTHIAZOL-3(2H)-ONE
May produce an allergic reaction.

Precautionary statements:

P261	Avoid breathing dust / fume / gas / mist / vapours.
P264	Wash the skin thoroughly after handling.
P280	Wear protective gloves / eye protection / face protection.
P333+P313	If skin irritation or rash occurs: get medical advice / attention.
P337+P313	If eye irritation persists: get medical advice / attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

Contains: 2-METHYL-4-ISOTHIAZOLIN-3-ONE
1,2-BENZISOTHIAZOL-3(2H)-ONE

2.3. Other hazards
On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

SECTION 3. Composition/information on ingredients

3.1. Substances
Information not relevant.

3.2. Mixtures
Contains:

Identification	**x = Conc. %**	**Classification 1272/2008 (CLP)**
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC		
CAS 64742-53-6	8,0 ≤ x ≤ 14,0	Asp. Tox. 1 H304, Classification note according to Annex VI to the CLP Regulation: L
EC 265-156-6		
INDEX 649-466-00-2		
Reg. no. 01-2119480375-34		
2-(2-BUTOXYETHOXY)ETHANOL		
CAS 112-34-5	2,0 ≤ x ≤ 5,72	Eye Irrit. 2 H319
EC 203-961-6		
INDEX 603-096-00-8		
Reg. no. 01-2119475104-44		
ALCOHOLS, C16-18 AND C18-UNSATD., ETHOXYLATED		
CAS 68920-66-1	1,0 ≤ x ≤ 3,94	Skin Irrit. 2 H315, Aquatic Chronic 2 H411, Classification note according to Annex VI to the CLP Regulation: P
EC 500-236-9		
INDEX -		
Reg. no. 01-2119489407-26		
1,1'-IMINODIPROPAN-2-OL		
CAS 110-97-4	0,5 ≤ x ≤ 2,55	Eye Irrit. 2 H319
EC 203-820-9		
INDEX 603-083-00-7		
ETHOXYLATED OLEOAMIDE		
CAS 26027-37-2	0,5 ≤ x ≤ 2,42	Eye Irrit. 2 H319
EC 607-851-2		
INDEX -		
FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH ACRYLIC ACID		
CAS -	0,5 ≤ x ≤ 1,05	Skin Corr. 1C H314

EC 939-424-4

INDEX -

Reg. no. 01-2119972299-21

ETHANOLAMINE

CAS 141-43-5 0,5 ≤ x ≤ 1,014 Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Skin Corr. 1B H314, STOT SE 3 H335, Aquatic Chronic 3 H412

EC 205-483-3

INDEX 603-030-00-8

Reg. no. 01-2119486455-28

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

CAS 110-25-8 0,4 ≤ x ≤ 0,9 Acute Tox. 4 H332, Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1

EC 203-749-3

INDEX -

Reg. no. 01-2119488991-20

2-METHYL-4-ISOTHIAZOLIN-3-ONE

CAS 2682-20-4 0,1 ≤ x ≤ 0,36 Acute Tox. 2 H330, Acute Tox. 3 H301, Acute Tox. 3 H311, Skin Corr. 1B H314, STOT SE 3 H335, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=1

EC 220-239-6

INDEX -

Reg. no. Escluso art. 15

1,2-BENZISOTHIAZOL-3(2H)-ONE

CAS 2634-33-5 0,1 ≤ x ≤ 0,36 Acute Tox. 4 H302, Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Acute 1 H400 M=1

EC 220-120-9

INDEX 613-088-00-6

Reg. no. Escluso Art. 15

FATTY ALCOHOL ALKOXYLATED

CAS - 0,01 ≤ x ≤ 0,075 Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=10, Aquatic Chronic 2 H411

EC -

INDEX -

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 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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 not available.

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
Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities
Store only in the original container. Store in a ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. 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 for mechanical machining.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters
Regulatory References:

DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
DNK	Danmark	Graensevaerdier per stoffer og materialer
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015

FIN	Suomi	HTP-arvot 2012. Haitallisiksi tunnetut pitoisuudet - Sosiaali- ja terveysministeriön julkaisuja 2012:5
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GBR	United Kingdom	EH40/2005 Workplace exposure limits
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NLD	Nederland	Databank of the social and Economic Concil of Netherlands (SER) Values, AF 2011:18
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 16 grudnia 2011r
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diaro da Republica I 26; 2012-02-06
EU	OEL EU	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 91/322/EEC.
	TLV-ACGIH	ACGIH 2019

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

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							5,4 mg/m3	VND

2-(2-BUTOXYETHOXY)ETHANOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	67	10	100,5	15	
MAK	DEU	67	10	100,5	15	
TLV	DNK	67,5	10			
VLA	ESP	67,5	10	101,2	15	
HTP	FIN	68	10			
VLEP	ITA	67,5	10	101,2	15	
OEL	NLD	50		100		SKIN
NDS	POL	67		100		
VLE	PRT	67,5	10	101,2	15	
OEL	EU	67,5	10	101,2	15	
TLV-ACGIH		66	10			

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 for water, intermittent release	11	mg/l
Normal value of STP microorganisms	200	mg/l
Normal value for the food chain (secondary poisoning)	56	mg/kg
Normal value for the terrestrial compartment	0,32	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
Oral			VND	5 mg/kg				
Inhalation	60,7 mg/m3	VND	40,5 mg/m3	40,5 mg/m3	101,2 mg/m3	VND	67,5 mg/m3	67,5 mg/m3

Skin	VND	50 mg/kg	VND	83 mg/kg

1,1'-IMINODIPROPAN-2-OL

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,2777	mg/l
Normal value in marine water	0,02777	mg/l
Normal value for fresh water sediment	2,33	mg/kg
Normal value for marine water sediment	0,233	mg/kg
Normal value for water, intermittent release	2,777	mg/l
Normal value of STP microorganisms	15000	mg/l

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
Oral				1,3 mg/kg bw/d				
Inhalation				3,9 mg/m3				16 mg/m3
Skin				6,3 mg/kg bw/d				12,5 mg/kg bw/d

FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH ACRYLIC ACID

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,015	mg/l
Normal value in marine water	0,0015	mg/l
Normal value for fresh water sediment	25	mg/kg
Normal value for marine water sediment	2,5	mg/kg
Normal value of STP microorganisms	9800	mg/l

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							NPI	3,19 mg/m3
Skin							NPI	0,9 mg/kg bw/d

ETHANOLAMINE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	5,1	2	10,2	4	SKIN
MAK	DEU	5,1	2	10,2	4	
TLV	DNK	2,5	1			SKIN
VLA	ESP	2,5	1	7,5	3	SKIN
HTP	FIN	2,5	1	7,6	3	SKIN
VLEP	FRA	2,5	1	7,6	3	SKIN
WEL	GBR	2,5	1	7,6	3	SKIN
VLEP	ITA	2,5	1	7,6	3	SKIN
OEL	NLD	2,5		7,6		SKIN
NDS	POL	2,5		7,5		
VLE	PRT	2,5	1	7,6	3	SKIN

OEL	EU	2,5	1	7,6	3	SKIN
TLV-ACGIH		7,5	3	15	6	

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,085	mg/l
Normal value in marine water	0,0085	mg/l
Normal value for fresh water sediment	0,425	mg/kg
Normal value for marine water sediment	0,0425	mg/kg
Normal value for water, intermittent release	0,025	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the terrestrial compartment	0,035	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
Oral			VND	3,75 mg/kg/d				
Inhalation			2 mg/kg	2 mg/kg			3,3 mg/kg	3,3 mg/kg
Skin			VND	0,24 mg/kg/d			VND	1 mg/kg/d

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

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
MAK	DEU	0,1		0,2		INHAL

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.

TLV of solvent mixture: 7,5 mg/m3

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 II 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

Appearance	clear liquid
Colour	amber
Odour	typical
Odour threshold	Not available
pH	10,07 Sol. 5%
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	> 100 °C
Evaporation Rate	Not available
Flammability of solids and gases	Not applicable
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not applicable
Upper explosive limit	Not applicable
Vapour pressure	Not available
Vapour density	Not available
Relative density	0,980 - 1,050 Kg/l
Solubility	emulsifiable in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	>20,5 mm2/sec (40°C)
Explosive properties	not applicable
Oxidising properties	Not available

9.2. Other information

VOC (Directive 2010/75/EC) : 4,46 %

SECTION 10. Stability and reactivity

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

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.

2-(2-BUTOXYETHOXY)ETHANOL
May react with: oxidising substances. May form peroxides with: oxygen. Develops hydrogen on contact with: aluminium. May form explosive mixtures with: air.
ETHANOLAMINE

May react dangerously with: acrylonitrile, chloroepoxypropane, chlorosulphuric acid, hydrogen chloride, iron-sulphur compounds, acetic acid, acetic anhydride, mesityl oxide, nitric acid, sulphuric acid, strong acids, vinyl acetate, cellulose nitrate.

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: sources of heat.
ETHANOLAMINE
Avoid exposure to: air, sources of heat.
FATTY ALCOHOL ALKOXYLATED
Avoid exposure to: heat, naked flames, electrostatic discharges.

10.5. Incompatible materials
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC
Keep away from: oxidising agents.
2-(2-BUTOXYETHOXY)ETHANOL
Incompatible with: oxidising substances ,strong acids, alkaline metals.
ALCOHOLS, C16-18 AND C18-UNSATD., ETHOXYLATED
Avoid contact with: strong oxidising agents.
ETHANOLAMINE
Incompatible with: iron, strong acids, strong oxidants.
FATTY ALCOHOL ALKOXYLATED
Avoid contact with: strong oxidising agents.

10.6. Hazardous decomposition products
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC
When heated to decomposition releases: carbon monoxide, sulphuric acid, sulphur oxides.
2-(2-BUTOXYETHOXY)ETHANOL
May develop: hydrogen.
ETHANOLAMINE
May develop: nitric oxide, carbon oxides.

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 toxicological effects

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.

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.

Interactive effects
Information not available.

ACUTE TOXICITY

LC50 (Inhalation - vapours) of the mixture:	> 20 mg/l
LC50 (Inhalation - mists / powders) of the mixture:	> 5 mg/l
LD50 (Oral) of the mixture:	>2000 mg/kg
LD50 (Dermal) of the mixture:	>2000 mg/kg

2-METHYL-4-ISOTHIAZOLIN-3-ONE

LD50 (Oral)	391 mg/kg Rat
LD50 (Dermal)	326 mg/kg Rabbit
LC50 (Inhalation)	0,11 mg/l/4h Rat

1,1'-IMINODIPROPAN-2-OL

LD50 (Oral)	2000 mg/kg Rat
LD50 (Dermal)	8000 mg/kg Rabbit

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

LD50 (Oral)	> 5000 mg/kg Rat
LC50 (Inhalation)	1,8 mg/l/4h Rat

ALCOHOLS, C16-18 AND C18-UNSATD., ETHOXYLATED

LD50 (Oral)	> 2000 mg/kg Rat

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

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

2-(2-BUTOXYETHOXY)ETHANOL

LD50 (Oral)	2410 mg/kg Mouse (OECD 401)
LD50 (Dermal)	2764 mg/kg Rabbit (OECD 402)
LC50 (Inhalation)	> 29 ppm/2h Rat (IRT)

ETHANOLAMINE

LD50 (Oral)	1515 mg/kg Rat
LD50 (Dermal)	2504 mg/kg Rabbit
LC50 (Inhalation)	1,48 mg/l Rat

FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH ACRYLIC ACID

LD50 (Oral)	6176 mg/kg Rat

1,2-BENZISOTHIAZOL-3(2H)-ONE

LD50 (Oral)	> 670 mg/kg Rat
LD50 (Dermal)	> 2000 mg/kg Rat

SKIN CORROSION / IRRITATION
Causes skin irritation.

SERIOUS EYE DAMAGE / IRRITATION
Causes serious eye irritation.

RESPIRATORY OR SKIN SENSITISATION
Sensitising for the skin. May produce an allergic reaction.
Contains: 2-METHYL-4-ISOTHIAZOLIN-3-ONE;
1,2-BENZISOTHIAZOL-3(2H)-ONE.

GERM CELL MUTAGENICITY
Does not meet the classification criteria for this hazard class.

CARCINOGENICITY
Does not meet the classification criteria for this hazard class.

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)

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

2-METHYL-4-ISOTHIAZOLIN-3-ONE

LC50 - for Fish	4,77 mg/l/96h Fish
EC50 - for Algae / Aquatic Plants	0,158 mg/l/72h Algae

1,1'-IMINODIPROPAN-2-OL

LC50 - for Fish	1466 mg/l/96h Fish
EC50 - for Crustacea	277,7 mg/l/48h
EC50 - for Algae / Aquatic Plants	339 mg/l/72h

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

LC50 - for Fish	10 mg/l Fish
EC50 - for Crustacea	0,43 mg/l/48h Daphnia
EC50 - for Algae / Aquatic Plants	6,3 mg/l/72h Algae

ALCOHOLS, C16-18 AND C18-UNSATD., ETHOXYLATED

LC50 - for Fish	> 1 mg/l/96h Fish
EC50 - for Crustacea	> 1 mg/l/48h Daphnia

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

LC50 - for Fish	> 100 mg/l/96h Fish

2-(2-BUTOXYETHOXY)ETHANOL

LC50 - for Fish	1300 mg/l/96h Lepomis macrochirus - OECD 203
EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h Scenedesmus subspicatus - OECD 201

ETHANOLAMINE

LC50 - for Fish	349 mg/l/96h Cyprinus carpio
EC50 - for Crustacea	65 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	2,5 mg/l/72h Selenastrum capricornutum

FATTY ACIDS, TALL-OIL, REACTION PRODUCTS WITH ACRYLIC ACID

LC50 - for Fish	15 mg/l/96h
EC50 - for Crustacea	22,5 mg/l/48h Daphnia
EC50 - for Algae / Aquatic Plants	62,9 mg/l/72h Algae

1,2-BENZISOTHIAZOL-3(2H)-ONE

LC50 - for Fish	1,9 mg/l/96h Fish
EC50 - for Crustacea	3,7 mg/l/48h Dafnie

FATTY ALCOHOL ALKOXYLATED

LC50 - for Fish	1 mg/l/96h
EC50 - for Crustacea	1 mg/l/48h
EC50 - for Algae / Aquatic Plants	0,1 mg/l/72h
Chronic NOEC for Crustacea	0,25 mg/l

12.2. Persistence and degradability

2-METHYL-4-ISOTHIAZOLIN-3-ONE

NOT rapidly degradable

1,1'-IMINODIPROPAN-2-OL

Solubility in water	Soluble

Rapidly degradable

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

Rapidly degradable

ALCOHOLS, C16-18 AND C18-UNSATD., ETHOXYLATED

Solubility in water	Insoluble

NOT rapidly degradable

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

Solubility in water	Insoluble

Entirely degradable

2-(2-BUTOXYETHOXY)ETHANOL

Solubility in water	Miscible

Rapidly degradable

ETHANOLAMINE

Solubility in water	Miscible

Rapidly degradable

12.3. Bioaccumulative potential

ALCOHOLS, C16-18 AND C18-UNSATD., ETHOXYLATED

Partition coefficient: n-octanol/water	> 3,8 Log Kow

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

Partition coefficient: n-octanol/water	> 3 Log Kow
BCF	< 500

2-(2-BUTOXYETHOXY)ETHANOL

Partition coefficient: n-octanol/water	1 Log Kow 20°C - pH 7

ETHANOLAMINE

Partition coefficient: n-octanol/water	-1,91

1,2-BENZISOTHIAZOL-3(2H)-ONE

Partition coefficient: n-octanol/water	0,64
BCF	3,2

12.4. Mobility in soil

2-(2-BUTOXYETHOXY)ETHANOL

Partition coefficient: soil/water	1

ETHANOLAMINE

Partition coefficient: soil/water	-0,5646

12.5. Results of PBT and vPvB assessment
On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%.

12.6. 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
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. Transport in bulk according to Annex II of Marpol and the IBC Code
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

Contained substance
Point 55 2-(2-BUTOXYETHOXY)ETHANOL Reg. no.: 01-2119475104-44

Substances in Candidate List (Art. 59 REACH)
On the basis of available data, the product does not contain any SVHC in percentage greater 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 2: Hazard to waters.

15.2. Chemical safety assessment
No chemical safety assessment has been performed for the mixture.

SECTION 16. Other information

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

Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Asp. Tox. 1	Aspiration hazard, category 1
Skin Corr. 1B	Skin corrosion, category 1B
Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2

STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1A	Skin sensitization, category 1A
Skin Sens. 1B	Skin sensitization, category 1B
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H411	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
- 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 STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

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) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 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
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9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
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12. Regulation (EU) 2016/1179 (IX Atp. CLP)
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14. Regulation (EU) 2018/1480 (XIII 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.