



## Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

#### 1.1. Product identifier

Code: **U01010**  
Product name: **PERFORMA DUE MD**

#### 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)**  
**ITALIA**  
tel. **+39 02 95746081**  
fax. **+ 39 02 95745182**

e-mail address of the competent person responsible for the Safety Data Sheet  
Product distribution by:

**info@cdu.net**  
**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.

#### 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.  
**EUH208** Contains: N,N-BIS(2-ETHYLHEXYL)-5-METHYL-1H-BENZOTRIAZOLE-1-METHYLAMINE (MIXTURE)  
May produce an allergic reaction.

Precautionary statements:

**P280** Wear eye protection / face protection.



P337+P313

If eye irritation persists: Get medical advice / attention.

**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****3.2. Mixtures**

Contains:

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

CAS 64742-53-6

48,53 ≤ x ≤ 53,53

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

**SULFONIC ACIDS, PETROLEUM, SODIUM SALTS**

CAS 68608-26-4

3,71 ≤ x ≤ 6,71

Eye Irrit. 2 H319

EC 271-781-5

INDEX -

Reg. no. 01-2119527859-22

**FATTY ACIDS, TALL-OIL, POTASSIUM SALTS**

CAS 61790-44-1

1,96 ≤ x ≤ 3,96

Eye Irrit. 2 H319

EC 263-136-1

INDEX -

**2-METHYLPENTANE-2,4-DIOL**

CAS 107-41-5

1,46 ≤ x ≤ 3,46

Eye Irrit. 2 H319, Skin Irrit. 2 H315

EC 203-489-0

INDEX 603-053-00-3

Reg. no. 01-2119539582-35

**2-PHENOXYETHANOL**

CAS 122-99-6

1,97 ≤ x ≤ 2,97

Acute Tox. 4 H302, Eye Irrit. 2 H319

EC 204-589-7

INDEX 603-098-00-9

Reg. no. 01-2119488943-21

**POTASSIUM 5-CARBOXY-4-HEXYLCYCLOHEX-2-ENE-1-OCTANOATE**

CAS 68227-50-9

1,47 ≤ x ≤ 2,47

Eye Dam. 1 H318, Skin Irrit. 2 H315

EC 269-362-7

INDEX -

**2-(2-BUTOXYETHOXY)ETHANOL**

CAS 112-34-5

0,79 ≤ x ≤ 1,79

Eye Irrit. 2 H319

EC 203-961-6

INDEX 603-096-00-8

Reg. no. 01-2119475104-44

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

CAS 110-25-8

0,18 ≤ x ≤ 0,58

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

**N,N-BIS(2-ETHYLHEXYL)-5-METHYL-1H-BENZOTRIAZOLE-1-METHYLAMINE (MIXTURE)**

CAS - 0,10 ≤ x ≤ 0,50 Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411

EC 939-700-4

INDEX -

Reg. no. 01-2119982395-25

**ETHYLENE GLYCOL**

CAS 107-21-1 0,01 ≤ x ≤ 0,13 Acute Tox. 4 H302, STOT RE 2 H373

EC 203-473-3

INDEX 603-027-00-1

Reg. no. 01-2119456816-28

**PYRIDINE-2-THIOL 1-OXIDE, SODIUM SALT**

CAS 3811-73-2 0,01 ≤ x ≤ 0,05 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

EC 223-296-5

INDEX -

Reg. no. 01-2119493385-28

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 for mechanical machining.

## SECTION 8. Exposure controls/personal protection

### 8.1. Control parameters

Regulatory References:

AUS	Österreich	Grenzwerteverordnung 2011 - GKV 2011
BEL	Belgique	AR du 11/3/2002. La liste est mise à jour pour 2010
BGR	България	МИНИСТЕРСТВО НА ТРУДА И СОЦИАЛНАТА ПОЛИТИКА МИНИСТЕРСТВО НА ЗДРАВЕОПАЗВАНЕТО НАРЕДБА No 13 от 30 декември 2003 г
CHE	Suisse / Schweiz	Valeurs limites d'exposition aux postes de travail 2014. / Grenzwerte am Arbeitsplatz
CYP	Κύπρος	Κ.Δ.Π. 268/2001; Κ.Δ.Π. 55/2004; Κ.Δ.Π. 295/2007; Κ.Δ.Π. 70/2012
CZE	Česká Republika	Nařízení vlády č. 361/2007 Sb. kterým se stanoví podmínky ochrany zdraví při práci
DEU	Deutschland	TRGS 900 (Fassung 31.1.2018 ber.) - Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
DNK	Danmark	Graensevaerdier per stoffer og materialer
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2017
EST	Eesti	Töökeskkonna keemiliste ohutegurite piirnormid 1. Vastu võetud 18.09.2001 nr 293 RT I 2001, 77, 460 - Redaktsiooni jõustumise kp: 01.01.2008
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
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
HRV	Hrvatska	NN13/09 - Ministarstvo gospodarstva, rada i poduzetništva
HUN	Magyarország	50/2011. (XII. 22.) NGM rendelet a munkahelyek kémiai biztonságáról
IRL	Éire	Code of Practice Chemical Agent Regulations 2011
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81



LTU	Lietuva	DĖL LIETUVOS HIGIENOS NORMOS HN 23:2007 CHEMINIŲ MEDŽIAGŲ 2007 m. spalio 15 d. Nr. V-827/A1-287
LUX	Luxembourg	Règlement grand-ducal du 28 juillet 2011 modifiant le règlement grand-ducal modifié du 30 juillet 2002 concernant la protection de la santé et de la sécurité des travailleurs contre les risques liés à des agents chimiques sur le lieu de travail
LVA	Latvija	Ķīmisko vielu aroda ekspozīcijas robežvērtības (AER) darba vides gaisā 2012
NLD	Nederland	Databank of the social and Economic Council of Netherlands (SER) Values, AF 2011:18
NOR	Norge	Veiledning om Administrative normer for forurensning i arbeidsatmosfære
POL	Polska	ROZPORZĄDZENIE MINISTRA PRACY I POLITYKI SPOŁECZNEJ z dnia 7 czerwca 2017 r
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 - Diário da Republica I 26; 2012-02-06
ROU	România	Monitorul Oficial al României 44; 2012-01-19
SVK	Slovensko	NARIADENIE VLÁDY Slovenskej republiky z 20. júna 2007
SVN	Slovenija	Uradni list Republike Slovenije 04.06.2015 (1602) - Pravilnik o spremembah in dopolnitvah Pravilnika o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu
SWE	Sverige	Occupational Exposure Limit Values, AF 2011:18
TUR	Türkiye	KİMYASAL MADDELERLE ÇALIŞMALARDA SAĞLIK VE GÜVENLİK ÖNLEMLERİ HAKKINDA YÖNETMELİK - Resmi Gazete Tarihi: 12.08.2013 Resmi Gazete Sayısı: 28733
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-METHYLPENTANE-2,4-DIOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	49	10	49	10
VLEP	BEL	123	25		
VLE	CHE	49	10	98	20
MAK	CHE	49	10	98	20
MAK	DEU	49	10	98	20
TLV	DNK	125	25		
VLA	ESP			123	25
HTP	FIN	120	25	200	40
VLEP	FRA			125	25
WEL	GBR	123	25	123	25
OEL	IRL			125	25
NDS	POL			120 (C)	
TLV-ACGIH				10	INHAL
TLV-ACGIH			25		50

**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	1,79	mg/kg



Normal value for marine water sediment	0,179	mg/kg
Normal value for water, intermittent release	4,29	mg/l
Normal value of STP microorganisms	20	mg/l
Normal value for the terrestrial compartment	0,11	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	1 mg/kg bw/d				
Inhalation	49 mg/m3	VND	25 mg/m3	3,5 mg/m3	98 mg/m3	VND	49 mg/m3	14 mg/m3
Skin			VND	1 mg/kg bw/d			VND	2 mg/kg bw/d

**2-PHENOXYETHANOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	110	20	110	20	
VLE	CHE	110	20	220	40	SKIN
MAK	CHE	110	20	220	40	SKIN
MAK	DEU	110	20	220	40	SKIN
HTP	FIN	110	20	290	50	SKIN
NDS	POL	230				
MV	SVN	110	20	110	20	SKIN

**Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,943	mg/l
Normal value in marine water	0,0943	mg/l
Normal value for fresh water sediment	7,237	mg/kg
Normal value for marine water sediment	0,7237	mg/kg
Normal value for water, intermittent release	3,44	mg/l
Normal value of STP microorganisms	24,8	mg/l
Normal value for the terrestrial compartment	1,26	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		9,23 mg/kg		9,23 mg/kg				
Inhalation	2,5		2,41	2,41 mg/m3			5,7 mg/m3	5,7 mg/m3
Skin				10,42 mg/kg				20,83 mg/kg

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

Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
MAK	AUS	67,5	15	101,2	15
VLEP	BEL	67,5	10	101,2	15
VLE	CHE	67	10	101,2	15
MAK	CHE	67	10	101,2	15



MAK	DEU	67	10	100,5	15	
TLV	DNK	100		200		
VLA	ESP	67,5	10	101,2	15	
HTP	FIN	68	10			
VLEP	FRA	67,5	10	101,2	15	
WEL	GBR	67,5	10	101,2	15	
TLV	GRC	67,5	10	101,2	15	
AK	HUN	67,5		101,2		
OEL	IRL	67,5	10	101,2	15	INHAL
VLEP	ITA	67,5	10	101,2	15	
RD	LTU	67,5	10	101,2	15	
VL	LUX	67,5	10	101,2	15	
RV	LVA	67,5	10	101,2	15	
OEL	NLD	50		100		SKIN
NDS	POL	67		100		
VLE	PRT	67,5	10	101,2	15	
TLV	ROU	150		250		
NPHV	SVK	67,5	10	101,2		
MV	SVN	67,5	10	101,25	15	
MAK	SWE	68	10	101	15	
ESD	TUR	67,5	10	101,2	15	INHAL
OEL	EU	67,5	10	101,2	15	
TLV-ACGIH		67,5	10	101,2	15	

<b>Predicted no-effect concentration - PNEC</b>								
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/l		
Normal value for the terrestrial compartment				0,32		mg/kg		

<b>Health - Derived no-effect level - DNEL / DMEL</b>								
	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								5 mg/kg
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				83 mg/kg

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

<b>Threshold Limit Value</b>					
Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm



MAK DEU 0,05 0,1 INHAL

**N,N-BIS(2-ETHYLHEXYL)-5-METHYL-1H-BENZOTRIAZOLE-1-METHYLAMINE (MIXTURE)**

Predicted no-effect concentration - PNEC

Normal value in fresh water 0,000976 mg/l

Normal value in marine water 0,000976 mg/l

Normal value for water, intermittent release 0,000976 mg/l

Normal value of STP microorganisms 0,69 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				0,2 mg/kg bw/d				
Inhalation				0,3 mg/m3			VND	1,3 mg/m3
Skin				0,2 mg/kg bw/d			VND	0,4 mg/kg bw/d

**ETHYLENE GLYCOL****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
MAK	AUS	26	10	52	20	SKIN
TLV	BGR	52		104		SKIN
VLE	CHE	26	10	52	20	SKIN
MAK	CHE	26	10	52	20	SKIN
TLV	CYP	52	20	104	40	SKIN
TLV	CZE	50		100		SKIN
MAK	DEU	26	10	52	20	SKIN
TLV	DNK	26	10			SKIN
VLA	ESP	52	20	104	40	SKIN
TLV	EST	52	20	104	40	SKIN
HTP	FIN	50	20	100	40	SKIN
VLEP	FRA	52	20	104	40	SKIN
WEL	GBR	52	20	104	40	
TLV	GRC	125	50	125	50	
GVI	HRV	52	20	104	40	SKIN
AK	HUN	52		104		
OEL	IRL	52	20	104	40	SKIN
VLEP	ITA	52	20	104	40	SKIN
RD	LTU	25	10	50	20	SKIN
VL	LUX	52	20	104	40	SKIN
RV	LVA	52	20	104	40	SKIN
OEL	NLD	52		104		SKIN
TLV	NOR		25			SKIN
NDS	POL	15		50		



**CENTRO DISTRIBUZIONE UTENSILI SCPA**Revision nr. 3  
Dated 21/01/2020  
Printed on 21/01/2020  
Page n. 9/18  
Replaced revision:2 (Dated: 05/02/2019)

EN

**PERFORMA DUE MD**

VLE	PRT	52	20	104	40	SKIN
TLV	ROU	52	20	104	40	SKIN
NPHV	SVK	52	20	104		SKIN
MV	SVN	52	20	104	40	SKIN
MAK	SWE	25	10	50	20	SKIN
ESD	TUR	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	VND	7 mg/m <sup>3</sup>					35 mg/m <sup>3</sup>	VND
Skin			VND	53 mg/kg			VND	106 mg/kg

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

Type	Country	TWA/8h		STEL/15min	
		mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm
MAK	AUS	1		4	
MAK	CHE	1		2	INHAL
AGW	DEU	1		2	INHAL
MAK	DEU	1		2	INHAL
TLV	DNK	1		2	
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.

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

Appearance	clear liquid
Colour	emerald
Odour	almond
Odour threshold	Not available
pH	9,3 – 9,7 (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	0,94 - 0,96 Kg/l (20°C)
Solubility	emulsifiable in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	>20,5 mm <sup>2</sup> /sec (40°C)
Explosive properties	Not applicable
Oxidising properties	Not available

**9.2. Other information**

Information not available.

**SECTION 10. Stability and reactivity****10.1. Reactivity**



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

#### 2-PHENOXYETHANOL

In acqua al 1% reagisce debolmente acido (pH=6).

#### 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.

#### 2-PHENOXYETHANOL

May form explosive mixtures with: air.

#### 2-(2-BUTOXYETHOXY)ETHANOL

May react dangerously with: strong oxidising agents. Develops hydrogen on contact with: light metals.

#### 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: sources of heat.

#### 2-PHENOXYETHANOL

Avoid exposure to: moist air, heat, light.

#### ETHYLENE GLYCOL

Avoid exposure to: sources of heat, naked flames.

### 10.5. Incompatible materials

#### DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

Incompatible with: oxidising agents.

#### 2-METHYLPENTANE-2,4-DIOL

Avoid contact with: strong oxidising agents, acids.

#### 2-PHENOXYETHANOL

Incompatible with: strong oxidants.

#### 2-(2-BUTOXYETHOXY)ETHANOL

Incompatible with: strong oxidising agents.

### 10.6. Hazardous decomposition products

#### DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

When heated to decomposition releases: carbon monoxide, hydrogen sulfide, sulphur oxides, sulphuric acid.

#### 2-METHYLPENTANE-2,4-DIOL

When heated to decomposition releases: carbon oxides, sulphur 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 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.

ETHYLENE GLYCOL

WORKERS: inhalation; contact with the skin.

POPULATION: room air inhalation; skin contact with 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; subsequently a phase of depression takes over. Kidney damage can occur, with anuria and uremia. The symptoms of overexposure are: vomiting, drowsiness, difficult breathing, convulsions. The lethal dose for humans is approximately 1.4 ml / kg.

Interactive effects

Information not available.

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:

Not classified (no significant component)

LD50 (Oral) of the mixture:

&gt;2000 mg/kg

LD50 (Dermal) of the mixture:

Not classified (no significant component)

SULFONIC ACIDS, PETROLEUM, SODIUM SALTS

LD50 (Oral)

&gt; 2000 mg/kg Rat

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

LD50 (Oral)

&gt; 5000 mg/kg Rat

LC50 (Inhalation)

1,8 mg/l/4h Rat

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

LD50 (Oral)

&gt; 5000 mg/kg Rat (API - 1986a)

LD50 (Dermal)

&gt; 5000 mg/kg Rabbit (API - 1982)

LC50 (Inhalation)

&gt; 5,53 mg/l/4h Rat (EMBSI - 1988a)

2-PHENOXYETHANOL

LD50 (Oral)

1850 mg/kg Rat (OECD - 401)

LD50 (Dermal)

&gt; 5000 mg/kg bw Rabbit

2-(2-BUTOXYETHOXY)ETHANOL

LD50 (Oral)

2410 mg/kg Rat (OECD-401)

LD50 (Dermal)

2764 mg/kg Rabbit (OECD-402)

LC50 (Inhalation)

&gt; 29 ppm/2h Rat

ETHYLENE GLYCOL

LD50 (Oral)

7712 mg/kg Rat

LD50 (Dermal)

&gt; 3500 mg/kg Mouse

LC50 (Inhalation)

&gt; 2,5 mg/l Rat

PYRIDINE-2-THIOL 1-OXIDE, SODIUM SALT

LD50 (Oral)

1500 mg/kg Rat

LD50 (Dermal)

1800 mg/kg Rabbit

LC50 (Inhalation)

2,7 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

May produce an allergic reaction. Contains: N,N-BIS(2-ETHYLHEXYL)-5-METHYL-1H-BENZOTRIAZOLE-1-METHYLAMINE (MIXTURE).

#### 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

The available studies have not shown carcinogenic power. In a 2-year carcinogenicity study, conducted by the US National Toxicology Program (NTP), in which ethylene glycol was administered in feeding, "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 mm<sup>2</sup>/sec (40°C)

## SECTION 12. Ecological information

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil and waterways. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

### 12.1. Toxicity

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

LC50 - for Fish	> 1 mg/l Fish
EC50 - for Crustacea	0,43 mg/l/48h Daphnia
EC50 - for Algae / Aquatic Plants	6,3 mg/l/72h Algae

#### DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

LC50 - for Fish	> 100 mg/l/96h Fish
Chronic NOEC for Crustacea	10 mg/l

#### 2-PHENOXYETHANOL

LC50 - for Fish	> 100 mg/l/96h Pimephales promelas
EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h Scenedesmus subspicatus
Chronic NOEC for Crustacea	> 1 mg/l Daphnia magna (OECD - 211)

#### 2-(2-BUTOXYETHOXY)ETHANOL

LC50 - for Fish	1300 mg/l/96h Lepomis macrochirus (OECD 201)
-----------------	--



EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna (OECD 203)
ETHYLENE GLYCOL	
LC50 - for Fish	72860 mg/l/96h Pimephales promelas
EC50 - for Crustacea	> 100 mg/l/48h Daphnia magna
2-METHYLPENTANE-2,4-DIOL	
LC50 - for Fish	8690 mg/l/96h Pimephales promelas
EC50 - for Algae / Aquatic Plants	> 429 mg/l/72h Pseudokirchnerella subcapitata
PYRIDINE-2-THIOL 1-OXIDE, SODIUM SALT	
LC50 - for Fish	0,0066 mg/l/96h
N,N-BIS(2-ETHYLHEXYL)-5-METHYL-1H-BENZOTRIAZOLE-1-METHYLAMINE (MIXTURE)	
LC50 - for Fish	1,3 mg/l/96h (OECD - 203)
EC50 - for Crustacea	2,05 mg/l/48h

## 12.2. Persistence and degradability

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

Rapidly degradable

### DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

Solubility in water Insoluble

Entirely degradable

### 2-PHENOXYETHANOL

Solubility in water 24000 mg/l

Rapidly degradable

### 2-(2-BUTOXYETHOXY)ETHANOL

Rapidly degradable

### ETHYLENE GLYCOL

Solubility in water 1000 -10000 mg/l

Rapidly degradable

### 2-METHYLPENTANE-2,4-DIOL

Solubility in water > 10000 mg/l

Rapidly degradable

### PYRIDINE-2-THIOL 1-OXIDE, SODIUM SALT

Rapidly degradable

### POTASSIUM 5-CARBOXY-4-HEXYLCYCLOHEX-2-ENE-1-OCTANOATE

NOT rapidly degradable

### N,N-BIS(2-ETHYLHEXYL)-5-METHYL-1H-BENZOTRIAZOLE-1-METHYLAMINE (MIXTURE)

Solubility in water Insoluble



NOT rapidly degradable 7% (28d) OECD 301/B

### 12.3. Bioaccumulative potential

DISTILLATES (PETROLEUM), HYDROTREATED LIGHT NAPHTHENIC

Partition coefficient: n-octanol/water > 2 Log Kow

BCF < 500

2-PHENOXYETHANOL

Partition coefficient: n-octanol/water 1,2

2-(2-BUTOXYETHOXY)ETHANOL

Partition coefficient: n-octanol/water 1 Log Kow (20°C pH 7 - OCSE 117)

ETHYLENE GLYCOL

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

2-METHYLPENTANE-2,4-DIOL

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

N,N-BIS(2-ETHYLHEXYL)-5-METHYL-1H-BENZOTRIAZOLE-1-METHYLAMINE (MIXTURE)

Partition coefficient: n-octanol/water 7,5

### 12.4. Mobility in soil

2-(2-BUTOXYETHOXY)ETHANOL

Partition coefficient: soil/water 1

### 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 3: Severe hazard to waters.

**15.2. Chemical safety assessment**

No a 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:





<b>Acute Tox. 3</b>	Acute toxicity, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>STOT RE 2</b>	Specific target organ toxicity - repeated exposure, category 2
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>Skin Sens. 1B</b>	Skin sensitization, category 1B
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 2</b>	Hazardous to the aquatic environment, chronic toxicity, category 2
<b>H311</b>	Toxic in contact with skin.
<b>H302</b>	Harmful if swallowed.
<b>H332</b>	Harmful if inhaled.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H400</b>	Very toxic to aquatic life.
<b>H411</b>	Toxic 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
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) 2018/1480 (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.

**Changes to previous review:**

The following sections were modified:

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