



EURO COLD srl

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Safety data sheet

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

1.1. Product identifier Code: Product name

EUR1045 EUROCLEAN 1045

1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use Product for the removal of fatty substances and oils, in multimaterial hydraulic systems

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 EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.





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Hazard classification and indication:
Skin sensitization, category 1
Hazardous to the aquatic environment, chronic toxicity,
category 2

H317 H411 May cause an allergic skin reaction. Toxic 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.



Signal words:

Warning

Hazard statements:

H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statements:

P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P273	Avoid release to the environment.
P280	Wear protective gloves.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P362+P364	Take off contaminated clothing and wash it before reuse
P391	Collect spillage
Contains:	(R)-P-MENTHA-1,8-DIENE

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. (R)-P-MENTHA-1,8-DIENE	Conc. %.	Classification 1272/2008 (CLP).
CAS. 5989-27-5	2,5 ≤ x < 5,5	Flam. Liq. 3 H226, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Acute 1 H400 M=1, Classification note according to Annex VI to the CLP Regulation: Note C
EC. 227-813-5		
INDEX. 601-029-00-7		
Nr. Reg. 01-2119529223-47-XXXX		
2-BUTOXYETHANOL		
CAS. 111-76-2	1 ≤ x < 4	Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315
EC. 203-905-0		





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INDEX. 603-014-00-0 Nr. Reg. 01-2119475108-36-XXXX

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. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorized 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 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.





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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. If the product is flammable, use an explosion-proof equipment. 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.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapors may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. 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 well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

CZE	Ceska Republika	Nazireni vlady c. 361/2007 Sb. Kterym se stanovi podminky ochrani zdravi pri praci.
DEU	Deutschland	TRGS 900 (Fassung 31.1. 2018 ber.) – Liste der Arbeitsplatzgrenzwerte und Kurtzzeitwerte
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2017
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GRB	United Kingdom	EH40/2005 Workplace exposure limits
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81





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POL	Poland	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 -
		Diaro da Republica I 26; 2012-02-06
ROU	Romania	Monitorul Oficial al Romaniei 44; 2012-01-19
SVK	Slovensko	NARIADENIE VLADY Slovenskej republiky z 20 juna 2007
EU	OEL EU	Directive (UE) 2017/2398; Directive (UE) 2017/164; Directive 2009/161/UE;
		Directive 2006/15/CE; Directive 2004/37/CE; Directive 2000/39/CE;
		Directive 91/322/CEE.
	TLV-ACGIH	ACGIH 2018

2-BUTOXYETHANOL

Threshold Limit Value.							
Туре	Country	TWA/8h		STEL/15min			
		mg/m3	ppm	mg/m3	ppm		
TLV	CZE	100		200		SKIN.	
AGW	DEU	49	10	196	40	SKIN.	
MAK	DEU	49	10	98	20	SKIN.	
VLA	ESP	98	20	245	50	SKIN.	
VLEP	FRA	49	10	246	50	SKIN.	
WEL	GRB	123	25	246	50	SKIN.	
TLV	GRC	120	25				
VLEP	ITA	98	20	246	50	SKIN.	
NDS	POL	98		200			
VLE	PRT	98	20	246	50	SKIN	
TLV	ROU	150	30	250	50	SKIN	
NPHV	SVK	98	20	246		SKIN	
OEL	EU	98	20	246	50	SKIN.	
TLV-ACGIH		97	20				

(R)-P-MENTHA-1,8-DIENE	E							
Threshold Limit Value.								
Туре	Country	TWA/8h		STEL/15min				
		mg/m3	ppm	mg/m3	ppm			
MAK	DEU	28	5	112	20	SKIN.		
Concentrazione prevista di non	effetto sull`ambiente	e - PNEC						
Reference value for STP micro	organisms			3,94		mg/l		
Health - Non-effect derive	ed level - DNEL /	DMEL						
	Effects on				Effects on			
	consumers				workers			
Route of Exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic

Skin

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction. VND = danger identified but no DNEL / PNEC available; NEA = no exposure foreseen; 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 suppliers for advice. Personal protective equipment must be CE marked, showing that it complies with applicable standards.





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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 Directive 89/686/EEC 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 vapors of various kinds and/or gases or vapors 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.

9.2. Other information.





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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-BUTOXYETHANOL: decomposes under the effect of heat.

10.2. Chemical stability.

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

10.3. Possibility of hazardous reactions.

The vapors may also form explosive mixtures with the air.

2-BUTOXYETHANOL: may react dangerously with: aluminum, oxidizing agents. Forms peroxide with air.

10.4. Conditions to avoid.

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

2-BUTOXYETHANOL: avoid exposure to sources of heat and naked flames.

10.5. Incompatible materials.

Information not available.

10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapors that are potentially dangerous to health may be released.

2-BUTOXYETHANOL: 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 Information not available.

Delayed and immediate effects as well as chronic effects from short and long term exposures Information not available.





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Interactive effects Information not available.

ACUTE TOXICITY LC50 (Inhalation):> 20 mg/l LD50 (Oral):>2000 mg/kg LD50 (Dermal) of the mixture:>2000 mg/kg

R) -P-MENTA-1,8-DIENE 4400 mg/kg Rat LD50 (Oral) > 5000 mg/kg Rabbit LD50 (Dermal)

2-BUTOXYETHANOL LD50 (Oral).615 mg/kg Rat LD50 (Dermal).405 mg/kg Rabbit LC50 (Inhalation).2,2 mg/l/4h Rat

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION Does not meet the classification criteria for this hazard class

<u>RESPIRATORY OR SKIN SENSITISATION</u> Sensitising for the skin

<u>GERM CELL MUTAGENICITY</u> Does not meet the classification criteria for this hazard class

CARCINOGENICITY Does not meet the classification criteria for this hazard class

<u>REPRODUCTIVE TOXICITY</u> Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE Does not meet the classification criteria for this hazard class

STOTS - REPEATED EXPOSURE Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information.

This product is dangerous for the environment and is toxic for aquatic organisms. In the long term, it have negative effects on aquatic environment. **12.1. Toxicity.**

(R)-P-MENTHA-1,8-DIENE LC50 - for Fish. EC50 - for Crustacea. EC50 - Algae / Aquatic Plants.

35 mg/l/96h Oncorhynchus mykiss 69,6 mg/l/48h Daphnia pulex 3,94 mg/l/72h sludge – bacteria treatment

12.2. Persistence and degradability.

(R)-P-MENTHA-1,8-DIENE





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Solubility in water. Rapidly degradable. mg/l 0,1 - 100

2-BUTOXYETHANOL Solubility in water. Rapidly degradable.

mg/l 1000 - 10000

12.3. Bioaccumulative potential.

(R)-P-MENTHA-1,8-DIENE Partition coefficient: n-octanol/water. BCF.	4,38 1022
2-BUTOXYETHANOL Partition coefficient: n-octanol/water.	0,81

12.4. Mobility in soil.

Information not available.

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 authorized waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

SECTION 14. Transport information.

14.1. UN number.

ADR / RID, IMDG, IATA:		3082
ADR / RID:	If transported in simple or internal capacity packaging of ≤ 5Kg or 5L, the product is not subject to the ADR / RID requirements, as stated by Special Disposition 375.	
IMDG:	If transported in simple or internal capacity packaging of \leq 5Kg or 5L, the product is not subject to the IMDG Code, as stated in section 2.10.2.7.	
IATA:	If transported in simple or internal capacity packaging of \leq 5Kg or 5L, the product is not subject to IATA requirements as stated in	





Special Disposition A197.

14.2. UN proper shipping name.

ADR / RID:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((R)-P-MENTHA-1,8-DIENE)
IMDG:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((R)-P-MENTHA-1,8-DIENE)
IATA:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ((R)-P-MENTHA-1,8-DIENE)

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14.3. Transport hazard class(es).

ADR / RID:	Class: 9	Label: 9	
IMDG:	Class: 9	Label: 9	, M
IATA:	Class: 9	Label: 9	, M

14.4. Packing group.

ADR / RID, IMDG,	111
IATA:	

14.5. Environmental hazards.

ADR / RID:	Environmentally Hazardous.	
IMDG:	Marine Pollutant.	× ×
IATA:	Environmentally Hazardous.	

14.6. Special precautions for user.

ADR / RID:	HIN - Kemler: 90 Special Provision: -	Limited Quantities: 5 L	Tunnel restriction code: (E)
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Pass.:	Maximum quantity: 450 L	Packaging instructions: 964
	Special Instructions:	A97, A158, A197	

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

SECTION 15. Regulatory information.





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

Seveso category. Direttiva 2012/18/CE: E2

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

Product. Point.

3

Substances in Candidate List (Art. 59 REACH).

Based on 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.

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

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

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
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 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.





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H411

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 labelling 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 (EU) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EU) 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 of the European Parliament (VII Atp. CLP)
- 11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X 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

- SDS template database of chemicals - Ministero della Salute e Istituto Superiore di Sanità

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.

Document changed compared to the previous version

Changes have been made to the following sections:

03 / 05 / 08.