

C1.03 - C1.03

Revision nr.5 Dated 29/01/2020 Printed on 21/12/2020 Page n. 1 / 11 Replaced revision:4 (Dated 30/08/2019) ΕN

## 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: C1.03 C1.03 Product name 1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use Acid detergent to clean after building 1.3. Details of the supplier of the safety data sheet Name **ITALIAN XS SRL - XSTONE** Full address Via Del Mulino 25 - Zona Artigianale 64039 Penna Sant'Andrea (TE) District and Country Italia Tel. +39 0861.650578 +39 0861.1755862 Fax e-mail address of the competent person responsible for the Safety Data Sheet office@italianxs.com 1.4. Emergency telephone number For urgent inquiries refer to Centro Antiveleni 24/24 h Policlinico A. Gemelli (Roma) Tel. +39 06.3054343 **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 2H319Causes serious eye irritation.Skin irritation, category 2H315Causes skin 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 H315

Causes serious eye irritation. Causes skin irritation.

Precautionary statements:

P280	
P337+P313	
P264	

Wear protective gloves / eye protection / face protection. If eye irritation persists: Get medical advice / attention. Wash . . . thoroughly after handling.



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## SECTION 2. Hazards identification ... / >>

## 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)
PHOSPHORIC	ACID		
CAS	7664-38-2	13,5 ≤ x < 15	Skin Corr. 1B H314, Eye Dam. 1 H318, Classification note according to Annex VI to the CLP Regulation: B
EC	231-633-2		
INDEX	015-011-00-6	3	
2-BUTOXYETH	IANOL		
CAS	111-76-2	3,5 ≤ 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		
INDEX	603-014-00-0	)	
Reg. no.	01-21194751	08-36-XXXX	
PROPAN-2-OL			
CAS	67-63-0	2,5 ≤ x < 3	Eye Irrit. 2 H319, STOT SE 3 H336
EC	200-661-7		
INDEX	603-117-00-0	)	
ACIDO CLORII	DRICO		
CAS	7647-01-0	0,85 ≤ x < 0,95	Met. Corr. 1 H290, Skin Corr. 1B H314, Eye Dam. 1 H318, STOT SE 3 H335, Classification note according to Annex VI to the CLP Regulation: B
EC	231-595-7		
INDEX	017-002-01->	(	
ALKYL DIMET	HYL BETAINE		
CAS	66455-29-6	0,15 ≤ x < 0,2	Eye Dam. 1 H318, Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412
EC INDEX	266-368-1		

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.



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## SECTION 5. Firefighting measures ... / >>

### 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

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during 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 the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and 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



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# **SECTION 8. Exposure controls/personal protection**

## 8.1. Control parameters

Regulatory References:	

DEU	Deutschland	TRGS 900 - Seite 1 von 69 (Fassung 29.03.2019)- Liste der Arbeitsplatzgrenzwerte und Kurzzeitwerte
ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition,published 2018)
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
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

PHOSPHORIC ACID									
Threshold Limit Value									
Туре	Country	TWA/8h		STEL/15	min	Remarks / Observations			
		mg/m3	ppm	mg/m3	ppm				
AGW	DEU	2		4		INHAL			
MAK	DEU	2		4		INHAL			
VLA	ESP	1		2					
VLEP	FRA	1	0,2	2	0,5				
WEL	GBR	1		2					
VLEP	ITA	1		2					
OEL	EU	1		2					
TLV-ACGIH		1		3					

				2-BUTO	XYETHANC	)L
<b>Threshold Limit</b>	Value					
Туре	Country	TWA/8h		STEL/15	min	Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP	98	20	245	50	SKIN
VLEP	FRA	9,8	2	147,6	30	SKIN
WEL	GBR		25		50	SKIN
TLV-ACGIH		97	20			

PROPAN-2-OL							
Threshold Limit	Value						
Туре	Country	TWA/8h		STEL/15r	min	Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	500	200	1000	400		
MAK	DEU	500	200	1000	400		
VLA	ESP	500	200	1000	400		
VLEP	FRA			980	400		
WEL	GBR	999	400	1250	500		
TLV-ACGIH		492	200	983	400		

## ACIDO CLORIDRICO

Threshold Limit Value							
Туре	Country	TWA/8h		STEL/15	min	Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
VLA	ESP	7,6	5	15	10		
VLEP	ITA	8	5	15	10		
OEL	EU	8	5	15	10		
TLV-ACGIH				2,9 (C)	2 (C)		

Legend:

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



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## SECTION 8. Exposure controls/personal protection ..../>>

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.

## **SECTION 9.** Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Properties		Value	Information
Appearance		liquid	
Colour		colourless	
Odour		characteristic	
Odour threshold		Not available	
рН		4.0	
Melting point / freezing point		Not available	
Initial boiling point	>	100 °C	
Boiling range		Not available	
Flash point	>	60 °C	
Evaporation rate		Not available	
Flammability (solid, gas)		Not available	
Lower inflammability limit		Not available	
Upper inflammability limit		Not available	
Lower explosive limit		Not available	
Upper explosive limit		Not available	
Vapour pressure		Not available	
Vapour density		Not available	
Relative density		1,11 g/cm3	
Solubility		soluble in water	
Partition coefficient: n-octanol/water		Not available	
Auto-ignition temperature		Not available	
Decomposition temperature		Not available	
Viscosity		Not available	
Explosive properties		Not available	
Oxidising properties		Not available	

## 9.2. Other information

Information not available



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# **SECTION 10. Stability and reactivity**

## 10.1. Reactivity

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

PHOSPHORIC ACID

Decomposes at temperatures above 200°C/392°F.

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 vapours may also form explosive mixtures with the air.

PHOSPHORIC ACID

Risk of explosion on contact with: nitromethane.May react dangerously with: alkalis,sodium borohydride.

2-BUTOXYETHANOL

May react dangerously with: aluminium, oxidising agents. Forms peroxides with: air.

ACIDO CLORIDRICO

Risk of explosion on contact with: alkaline metals, aluminium powder, hydrogen cyanide, alcohol.

## 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,naked flames.

10.5. Incompatible materials

### PHOSPHORIC ACID

Incompatible with: metals,strong alkalis,aldehydes,organic sulphides,peroxides. ACIDO CLORIDRICO

Incompatible with: alkalis,organic substances,strong oxidants,metals.

## 10.6. Hazardous decomposition products

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

PHOSPHORIC ACID May develop: phosphoryl oxides.
2-BUTOXYETHANOL May develop: hydrogen.
ACIDO CLORIDRICO In decomposition develops: hydrochloric acid fumes.

**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 exposure

Information not available

Interactive effects



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## SECTION 11. Toxicological information ... / >>

## Information not available

#### ACUTE TOXICITY

LC50 (Inhalation) of the mixture: LD50 (Oral) of the mixture: LD50 (Dermal) of the mixture:

> 2-BUTOXYETHANOL LD50 (Oral) LD50 (Dermal) LC50 (Inhalation)

PROPAN-2-OL LD50 (Oral) LD50 (Dermal) LC50 (Inhalation)

ACIDO CLORIDRICO LD50 (Oral) LC50 (Inhalation)

PHOSPHORIC ACID LD50 (Oral) LD50 (Dermal) LC50 (Inhalation)

### SKIN CORROSION / IRRITATION

Causes skin irritation

## SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

## **RESPIRATORY OR SKIN SENSITISATION**

Does not meet the classification criteria for this hazard class

#### GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

#### **CARCINOGENICITY**

Does not meet the classification criteria for this hazard class

## 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

## **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.

> 20 mg/l >2000 mg/kg >2000 mg/kg

> 300 mg/kg Ratto> 1000 mg/kg Rabbit> 10 mg/l/4h Rat

4710 mg/kg Rat 12800 mg/kg Rat 72,6 mg/l/4h Rat

900 mg/kg coniglio 1,68 mg/l/1h ratto

1530 mg/kg Rat 2740 mg/kg Rabbit > 0,85 mg/l/1h Rat ΕN



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## SECTION 12. Ecological information ... / >>

## 12.1. Toxicity

2-BUTOXYETHANOL LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants	> 100 mg/l/96h > 100 mg/l/48h > 100 mg/l/72h
ACIDO CLORIDRICO LC50 - for Fish	20 mg/l/96h lepomis macrochirus
ALKYL DIMETHYL BETAINE LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants	43 mg/l/96h Pesci 11 mg/l/48h Crostacei 5 mg/l/72h
12.2. Persistence and degradability	
2-BUTOXYETHANOL Solubility in water Rapidly degradable	1000 - 10000 mg/l
PROPAN-2-OL Rapidly degradable	
ACIDO CLORIDRICO Solubility in water Degradability: information not available	> 10000 mg/l
PHOSPHORIC ACID Solubility in water Degradability: information not available	> 850000 mg/l
ALKYL DIMETHYL BETAINE Entirely degradable	
12.3. Bioaccumulative potential	
2-BUTOXYETHANOL Partition coefficient: n-octanol/water	0,81
PROPAN-2-OL Partition coefficient: n-octanol/water	0,05
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 authorised 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.



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# **SECTION 14. Transport information**

## 14.1. UN number

ADR / RID, IMDG, IATA: 3264

#### 14.2. UN proper shipping name

ADR / RID:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
IMDG:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
IATA:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.

#### 14.3. Transport hazard class(es)

ADR / RID:	Class: 8	Label: 8	BE BE
IMDG:	Class: 8	Label: 8	8
IATA:	Class: 8	Label: 8	

#### 14.4. Packing group

ADR / RID, IMDG, IATA: III

#### 14.5. Environmental hazards

ADR / RID: NO IMDG: NO IATA: NO

#### 14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 5 L	Tunnel restriction code: (E)
	Special Provision: -		
IMDG:	EMS: F-A, S-B	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 856
	Pass.:	Maximum quantity: 5 L	Packaging instructions: 852
	Special Instructions:	A3, A803	

#### 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	<u>contained</u>	<u>substances</u>	<u>pursuant to</u>	Annex	<u>XVII to</u>	<u>EC Rec</u>	<u>gulation</u> 1	<u>1907/2006</u>	<u>6</u>
Product											
Point		3									

<u>Substances in Candidate List (Art. 59 REACH)</u> 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



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## SECTION 15. Regulatory information ... / >>

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

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

## **SECTION 16. Other information**

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

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



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## SECTION 16. Other information ... / >>

- 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) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
- 16. Regulation (EU) 2019/521 (XII 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.

Product's classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.

The data for evaluation of chemical-physical properties are reported in section 9.

Changes to previous review: The following sections were modified: 08 / 09 / 15.