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# **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

**BRAVO DISINCROSTANTE** Product name

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

Intended use acid degreasing detergent

Identified Uses	Industrial	Professional	Consumer
ADHESIVE SYSTEM/TREATMEI	NT FOR STONE		
SECTOR	-	$\checkmark$	-
1.3. Details of the supplier of the s	afety data sheet		
Name	Tenax Spa		
Full address	Via I Manuia 200		

Via I Maggio, 226 Full address **District and Country** 37020 Volargne

(VR) Italy

+39 045 6887593 Tel. +39 045 6862456 Fax

e-mail address of the competent person

responsible for the Safety Data Sheet msds@tenax.it

#### 1.4. Emergency telephone number

For urgent inquiries refer to 800.883300 (24h) Centro Antiveleni (Bergamo)

0 800 314 7900 (Turkey) only, or +90 0312 433 70 01 Toxicology Department and

**Poisons Centre** 

+98 21 6419306 / +98 21 6405569 **Poisons Information Centre (Tehran)** 

+91 484 4008056 Poison Control Centre (South India)

(011) 642 2417 / (011) 488 3108 Anti-Poison Centre (Johannesburg)

# **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

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:

H314 Skin corrosion, category 1 Causes severe skin burns and eye damage. H318 Causes serious eye damage. Serious eye damage, category 1 H335 May cause respiratory irritation. Specific target organ toxicity - single exposure, H317 Skin sensitization, category 1 May cause an allergic skin reaction.

#### 2.2. Label elements

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

Hazard pictograms:



Danger Signal words:



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

Hazard statements:

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.H317 May cause an allergic skin reaction.

Precautionary statements:

P501 Dispose of contents / container according to applicable law.

P102 Keep out of reach of children.

**P260** Do not breathe dust / fume / gas / mist / vapours / spray.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Contains: HYDROCHLORIC ACID

2-BUTYNE-1,4-DIOL

#### 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)

HYDROCHLORIC ACID

CAS 7647-01-0 10 ≤ x < 20 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-X Reg. no. 01-2119484862-27

PROPAN-2-OL

CAS 67-63-0  $10 \le x < 20$  Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336

EC 200-661-7 INDEX 603-117-00-0 Reg. no. 01-2119457558-25

2-BUTYNE-1,4-DIOL

CAS 110-65-6 1 ≤ x < 3.5 Acute Tox. 3 H301, Acute Tox. 3 H311, Acute Tox. 3 H331, STOT RE 2 H373.

Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317,

Classification note according to Annex VI to the CLP Regulation: D

EC 203-788-6 INDEX 603-076-00-9

Oxirane, 2-methyl-, polymer with oxirane, tridecyl ether

CAS 61725-89-1 1 ≤ x < 3,5 Skin Irrit. 2 H315, Aquatic Acute 1 H400 M=1

EC 612-360-1

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.



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#### SECTION 4. First aid measures ....

#### 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

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

#### 5.2. Special hazards arising from the substance or mixture

#### HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. 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.



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# SECTION 7. Handling and storage

#### 7.3. Specific end use(s)

Information not available

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

# 8.1. Control parameters

#### Regulatory References:

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
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
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
NOR	Norge	Veiledning om Administrative normer for forurensning i arbeidsatmosfære
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZIN Y, PRAC Y I POLITYKI SPOŁECZNEJ z dnia 12 czerwca 2018 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
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
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2004/37/EC; Directive 91/322/EEC.
	TI ) / A O O II I	4.0011.0040

TLV-ACGIH **ACGIH 2018** 

				PROP	AN-2-OL		
Threshold Limit \	/alue						
Туре	Country	TWA/8h		STEL/15r	min		
		mg/m3	ppm	mg/m3	ppm		
TLV	CZE	500		1000		SKIN	
AGW	DEU	500	200	1000	400		
MAK	DEU	500	200	1000	400		
TLV	DNK	490	200				
VLA	ESP	500	200	1000	400		
VLEP	FRA			980	400		
WEL	GBR	999	400	1250	500		
TLV	GRC	980	400	1225	500		
OEL	NLD	650					
TLV	NOR	245	100				
NDS	POL	900		1200			
MV	SVN	500	200	2000	800		
MAK	SWE	350	150	600	250		
TLV-ACGIH		492	200	983	400		

				HYDROCI	HI ORIC A
Threshold Limit	Value			HIDROCI	ILUINO A
Type	Country	TWA/8h		STEL/15	min
,,	,	mg/m3	ppm	mg/m3	ppm
VLA	ESP	7,6	5	15	10
VLEP	ITA	8	5	15	10
NDS	POL	5		10	
VLE	PRT	8	5	15	10
MV	SVN	8	5	16	10
OEL	EU	8	5	15	10
TLV-ACGIH				2,9 (C)	2 (C)

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

# 8.2. Exposure controls



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

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 III 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 a hood visor or protective visor combined with airtight 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 YELLOW-RED Odour typical

Not available

Not available

Not available

<2 Melting point / freezing point Not available Initial boiling point 100 °C Boiling range Not available Flash point Not applicable **Evaporation Rate** Not available Flammability of solids and gases 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 Not available Solubility soluble in water Partition coefficient: n-octanol/water Not available Auto-ignition temperature Not available Decomposition temperature Not available Not available Viscosity

9.2. Other information

Explosive properties

Oxidising properties

Odour threshold

VOC (Directive 2010/75/EC): 10,00 % VOC (volatile carbon): 5.99 %



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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.

#### 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.

HYDROCHLORIC ACID

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.

#### 10.5. Incompatible materials

HYDROCHLORIC ACID

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.

HYDROCHLORIC ACID

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

Information not available

ACUTE TOXICITY

LC50 (Inhalation) of the mixture:> 5 mg/lLD50 (Oral) of the mixture:>2000 mg/kgLD50 (Dermal) of the mixture:>2000 mg/kg



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#### SECTION 11. Toxicological information

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

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

2-BUTYNE-1,4-DIOL LD50 (Oral) LD50 (Dermal) LC50 (Inhalation)

132 mg/kg Rat 659 mg/kg Rat 0.69 mg/l/4h Rat

#### SKIN CORROSION / IRRITATION

Corrosive for the skin

Classification according to the experimental Ph value

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

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

May cause respiratory irritation

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.

### 12.1. Toxicity

Information not available

# 12.2. Persistence and degradability

HYDROCHLORIC ACID Solubility in water Degradability: information not available

> 10000 mg/l

PROPAN-2-OL Rapidly degradable



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

2-BUTYNE-1,4-DIOL

Solubility in water > 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

PROPAN-2-OL

Partition coefficient: n-octanol/water 0,05

2-BUTYNE-1,4-DIOL

Partition coefficient: n-octanol/water -0,73 BCF 3,16

12.4. Mobility in soil

2-BUTYNE-1,4-DIOL

Partition coefficient: soil/water -0,3016

#### 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.

# **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. (HYDROCHLORIC ACID) IMDG: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID) IATA: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (HYDROCHLORIC ACID)

### 14.3. Transport hazard class(es)

ADR / RID: Class: 8 Label: 8

IMDG: Class: 8 Label: 8

IATA: Class: 8 Label: 8



#### 14.4. Packing group

ADR / RID, IMDG, IATA: II



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#### SECTION 14. Transport information .../>>

#### 14.5. Environmental hazards

ADR / RID: NO IMDG: NO IATA: NO

#### 14.6. Special precautions for user

ADR / RID: HIN - Kemler: 80 Limited Quantities: 1 L Tunnel restriction code: (E)

Special Provision: -

IMDG: EMS: F-A, S-B Limited Quantities: 1 L

IATA: Cargo: Maximum quantity: 30 L Packaging instructions: 855
Pass.: Maximum quantity: 1 L Packaging instructions: 851

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 contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 3 - 40

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.

# 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. 2 Flammable liquid, category 2

**Met. Corr. 1** Substance or mixture corrosive to metals, category 1

Acute Tox. 3 Acute toxicity, category 3

STOT RE 2 Specific target organ toxicity - repeated exposure, category 2

Skin Corr. 1BSkin corrosion, category 1BSkin Corr. 1Skin corrosion, category 1Eye Dam. 1Serious eye damage, category 1Eye Irrit. 2Eye irritation, category 2Skin Irrit. 2Skin irritation, category 2



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#### SECTION 16. Other information

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Skin sensitization, category 1 Skin Sens. 1

Hazardous to the aquatic environment, acute toxicity, category 1 **Aquatic Acute 1** 

H225 Highly flammable liquid and vapour.

H290 May be corrosive to metals. H301 Toxic if swallowed. Toxic in contact with skin. H311

H331 Toxic if inhaled

May cause damage to organs through prolonged or repeated exposure. H373

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage. Causes serious eye irritation. H319 Causes skin irritation. H315

May cause respiratory irritation. H335 H317 May cause an allergic skin reaction. H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

#### 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)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology



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#### **SECTION 16. Other information**

- 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: