

Revision nr. 1 Dated 22/4/2015

SEAL-R-OP

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# Safety data sheet

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

1.1. Product identifier

Code: SEAL-R-OP
Product name Matt Regular Sealer

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

Intended use Acrylic cement sealer on solvent base

1.3 Details of the supplier of the safety data sheet

Company name IDEAL WORK SRL Address Via Kennedy, 52

Place and country 31030 Vallà di Riese Pio X (TV)

Italy

tel. 0423 /4535 fax 0423 /748429

e-mail address for a competent person, responsible for the safety data sheet

sicurezza@idealwork.it

1.4 Emergency telephone number

For information in an emergency Poison center:

National Poisons Information Service (Birmingham

Unit) City Hospital Dudley Rd Birmingham Telephone: +44 121 507 4123 Fax: +44 121 507 55 88

Emergency telephone: 844 892 0111

# **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.

### 2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments.

Hazard classification and indication:

Flam. Liq. 3 H226
Lact. H362
Asp. Tox. 1 H304
STOT RE 2 H373
Skin Irrit. 2 H315
STOT SE 3 H335
Aquatic Chronic 3 H412

### 2.1.2. 67/548/EEC and 1999/45/EC Directives and following amendments and adjustments.

Danger Symbols:

Xn-N

R phrases:

10-20/21-38-51/53-64-65-66

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

# 2.2. Label elements.



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

#### Hazard pictograms:







Signal words:

Danger

### Hazard statements:

H226 Flammable liquid and vapour.

H362 May cause harm to breast-fed children. H304 May be fatal if swallowed and enters airways.

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

H315 Causes skin irritation.

May cause respiratory irritation. H335

Harmful to aquatic life with long lasting effects. H412

#### Precautionary statements:

P201 Obtain special instructions before use.

P210 Keep away from heat / sparks / open flames / hot surfaces. No smoking.

Keep container tightly closed. P233

Wear protective gloves / protective clothing / eye protection / face protection. P280 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Contains: Paraffina clorurata

XYLENE (MIXTURE OF ISOMERS)

SOLVENT NAPHTA (PETROLEUM), LIGHT AROM

### 2.3. Other hazards.

Information not available.

# **SECTION 3. Composition/information on ingredients.**

# 3.1. Substances.

Information not relevant.

# 3.2. Mixtures.

# Contains:

Identification. XYLENE (MIXTURE OF ISOMERS)	Conc. %.	Classification 67/548/EEC.	Classification 1272/2008 (CLP).
CAS. 1330-20-7 EC. 215-535-7	50 - 54	R10, Xn R20/21, Xi R38, Note C	Flam. Liq. 3 H226, Acute Tox. 4 H312, Acute Tox. 4 H332, Asp. Tox. 1 H304, STOT RE 2 H373, Skin Irrit. 2 H315, STOT SE 3 H335, Note C
INDEX. 601-022-00-9			
SOLVENT NAPHTA (PETROLEUM), LIGHT AROM			

CAS. 64742-95-6

18 - 19,5 R10, R66, R67, Xn R65, Xi R37, N Asp. Tox. 1 H304, Note P R51/53, Note P

EC. 265-199-0



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INDEX. 649-356-00-4

Paraffina clorurata CAS. 85535-85-9

2 - 2,5

R64, R66, N R50/53

Lact. H362, Aquatic Acute 1 H400 M=1, Aquatic

Chronic 1 H410, EUH066

EC. 287-477-0

INDEX. 602-095-00-X Reg. no. 01-2119519269-33

**N-BUTYL ACETATE** 

CAS. 123-86-4

2 - 2.5

R10, R66, R67

Flam. Liq. 3 H226, STOT SE 3 H336, EUH066

EC. 204-658-1

INDEX. 607-025-00-1

Note: Upper limit is not included into the range.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F), N = Dangerous for the Environment(N)

# **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.

For symptoms and effects caused by the contained substances, see chap. 11.

### 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).



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# **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. Check incompatibility for container material in section 7. 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, 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. 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:

United Kingdom EH40/2005 Workplace exposure limits. Containing the list of workplace exposure limits for use with

the Control of Substances Hazardous to Health Regulations (as amended).

Éire Code of Practice Chemical Agent Regulations 2011.

OEL EU Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC.

TLV-ACGIH **ACGIH 2012** 

XYLENE (MIXTURE OF I	SOMERS)					
Threshold Limit Value. Type	Country	TWA/8h		STEL/15min		
		mg/m3	ppm	mg/m3	ppm	
TLV-ACGIH		434	100	651	150	
OEL	EU	221	50	442	100	SKIN
OEL	IRL	221	50	442	100	SKIN
WEL	UK	220	50	441	100	



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N-BUTYL ACETATE Threshold Limit Value. Type	Country	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH		713	150	950	200
OEL	IRL	710	150	950	200
WEL	UK	724	150	966	200

Legend:

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

TLV of solvent mixture: 441 mg/m3.

### 8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

### 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.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

#### **EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

# RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

# ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.



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

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

Appearance liquid Colour colourless Odour characteristic Odour threshold. Not available. Not available. Melting point / freezing point. Not available. Initial boiling point. Not available. Boiling range. Not available. Flash point. 24 °C. **Evaporation Rate** Not available. Flammability of solids and gases Not available. Lower inflammability limit. Not available. Upper inflammability limit. Not available. Not available. Lower explosive limit. Upper explosive limit. Not available. Vapour pressure. Not available. Vapour density Not available. Relative density. 0,945 Kg/I Solubility insoluble 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.

VOC (Directive 2004/42/EC): 73,55 % - 676,00 g/litre. VOC (volatile carbon): 64,67 % - 611,12 g/litre.

# **SECTION 10. Stability and reactivity.**

#### 10.1. Reactivity.

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

N-BUTYL ACETATE: decomposes readily with water, especially when warm.

#### 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.

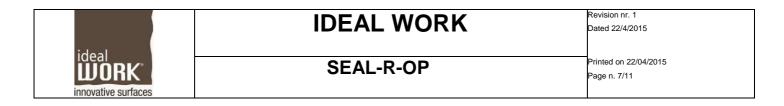
XYLENE (MIXTURE OF ISOMERS): stable, but may develop violent reactions in the presence of strong oxidising agents such as sulphuric and nitric acids and perchlorates. May form explosive mixtures with the air.

N-BUTYL ACETATE: risk of explosion on contact with: strong oxidising agents. Can react dangerously with alkaline hydroxides, potassium tert-butoxide. Forms explosive mixtures with the air.

# 10.4. Conditions to avoid.

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

N-BUTYL ACETATE: avoid exposure to moisture, sources of heat and naked flames.



#### 10.5. Incompatible materials.

N-BUTYL ACETATE: water, nitrates, strong oxidising agents, acids and alkalis and potassium tert-butoxide.

#### 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.

# **SECTION 11. Toxicological information.**

#### 11.1. Information on toxicological effects.

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.

This product must be handled carefully because of its possible negative effects on children during the breast-feeding period.

The introduction of even small quantities of this liquid into the respiratory system in case of ingestion or vomit may cause bronchopneumonia and pulmonary edema.

This product may cause functional disorders or morphological mutations after repeated or prolonged exposure and/or may accumulate inside the human body and is thus graded as dangerous.

Acute effects: contact with skin may cause: irritation, erythema, edema, dryness and chapped skin. Vapour inhalation may slightly irritate the upper respiratory trait. Ingestion may cause health disorders, including stomach pain and sting, nausea and sickness.

Acute effects: vapour inhalation may irritate the lower and upper respiratory tract and cause cough and respiratory disorders. At higher concentrations it can also cause pulmonary edema. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

XYLENE (MIXTURE OF ISOMERS): has a toxic effect on the CNS (encephalopathies). Irritating to the skin, conjunctivae, cornea and respiratory apparatus.

N-BUTYL ACETATE:in humans the substance's vapours cause irritation to the eues and nose. In the event of repeated exposure, there is skin irritation, dermatosis (with driness and flaking of the skin) and keratitis.

Paraffina clorurata

LD50 (Oral). > 4000 mg/kg Rat

LD50 (Dermal). 4000 mg/kg Rat

LC50 (Inhalation). > 48170 mg/m3 Rat

XYLENE (MIXTURE OF ISOMERS)

LD50 (Oral). 3523 mg/kg Rat

LD50 (Dermal). 4350 mg/kg Rabbit

LC50 (Inhalation). 26 mg/l/4h Rat

# N-BUTYL ACETATE

LD50 (Oral). > 6400 mg/kg Rat LD50 (Dermal). > 5000 mg/kg Rabbit

LC50 (Inhalation). 21,1 mg/l/4h Rat

# **SECTION 12. Ecological information.**

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

### 12.1. Toxicity.

Information not available.

# 12.2. Persistence and degradability.

Information not available.

# 12.3. Bioaccumulative potential.

Information not available.

#### 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.

IInformation not available.



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# **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.

Avoid littering. Do not contaminate soil, sewers and waterways.

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.**

These goods must be transported by vehicles authorized to the carriage of dangerous goods according to the provisions set out in the current edition of the Code of International Carriage of Dangerous Goods by Road (ADR) and in all the applicable national regulations. These goods must be packed in their original packagings or in packagings made of materials resistant to their content and not reacting dangerously with it. People loading and unloading dangerous goods must be trained on all the risks deriving from these substances and on all actions that must be taken in case of emergency situations.

Road and	d rail transport: ADR/RID Class:	3	UN:	1263
	Packing Group:	III		
	Label:	3		
	Nr. Kemler:	30		
	Limited Quantity.	5 L		
	Tunnel restriction code.	(D/E)		
	Proper Shipping Name:	PAINT		
	Special Provision:	640E		
Carriage	by sea (shipping): IMO Class:	3	UN:	1263
3	Packing Group:	III		
	Label:	3		
	EMS:	F-E ,	<u>S-E</u>	
	Marine Pollutant.	NO		
	Proper Shipping Name:	PAINT		
Transpor	rt by air: IATA:	3	UN:	1263
3	Packing Group:	III		
	Label:	3		
	Cargo:			
	Packaging instructions:  Pass.:	366	Maximum quantity:	220 L
	Packaging instructions:	355	Maximum quantity:	60 L
	Special Instructions:	A3, A72, A192	. ,	
	Proper Shipping Name:	PAINT		

### Packaging:

20 LT BUCKET - APPROVAL 1A2/Y1,6/100 - Ø 31 cm x 39cmH - Weight 1,300 KG



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# **SECTION 15. Regulatory information.**

	15.1. Safety	/, health a	and environmental	regulations/le	gislation	specific for	or the substance	e or mixture
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Seveso category. 9ii, 6

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

Product.

Point. 3 - 40

Contained substance.

Point. 52 FTALATO DI

ISONONILE

Substances in Candidate List (Art. 59 REACH).

None.

Substances subject to authorisarion (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.

# VOC (Directive 2004/42/EC) :

Binding primers.

Limit value: 750,00 (2010) VOC of product : 695,05

### 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

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Lact Reproductive toxicity, effects on or via lactation

Acute Tox. 4 Acute toxicity, category 4 Asp. Tox. 1 Aspiration hazard, category 1

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

Skin Irrit. 2 Skin irritation, category 2

STOT SE 3 Specific target organ toxicity - single exposure, category 3 **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 3** Hazardous to the aquatic environment, chronic toxicity, category 3

H226 Flammable liquid and vapour.

H362 May cause harm to breast-fed children.

H312 Harmful in contact with skin.

H332 Harmful if inhaled.

H304 May be fatal if swallowed and enters airways.

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

H315 Causes skin irritation.

H335 May cause respiratory irritation. H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

**EUH066** Repeated exposure may cause skin dryness or cracking.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R10 FLAMMABLE.

R20/21 HARMFUL BY INHALATION AND IN CONTACT WITH SKIN.

R37 IRRITATING TO RESPIRATORY SYSTEM.

R38 IRRITATING TO SKIN.

R50/53 VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE

EFFECTS IN THE AQUATIC ENVIRONMENT.

R51/53 TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG-TERM ADVERSE

> EFFECTS IN THE AQUATIC ENVIRONMENT. MAY CAUSE HARM TO BREASTFED BABIES.

R64

R65 HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

REPEATED EXPOSURE MAY CAUSE SKIN DRYNESS OR CRACKING. R66

R67 VAPOURS MAY CAUSE DROWSINESS AND DIZZINESS.

### 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



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- 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. Directive 1999/45/EC and following amendments
- 2. Directive 67/548/EEC and following amendments and adjustments
- 3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
- 6. Regulation (EC) 453/2010 of the European Parliament 7. Regulation (EC) 286/2011 (II Atp. CLP) of the European Parliament
- 8. Regulation (EC) 618/2012 (III Atp. CLP) of the European Parliament
- 9. The Merck Index. 10th Edition
- 10. Handling Chemical Safety
- 11. Niosh Registry of Toxic Effects of Chemical Substances
- 12. INRS Fiche Toxicologique (toxicological sheet)
- 13. Patty Industrial Hygiene and Toxicology
- 14. N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- 15. ECHA website

#### 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 / 02 / 08 / 09 / 11 / 12 / 14 / 16.