

# NORD RESINE S.p.A.

002 - AM PRIMER

Revision nr.12 Dated 25/05/2023 Printed on 26/05/2023 Page n. 1 / 10 Replaced revision:11 (Dated 11/04/2023) ΕN

	Sat	fety Data Shee	t	
According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH				
SECTION 1. Identification of the subs	stance/m	nixture and of the co	npany/undertaking	
1.1. Product identifier				
Code:	002			
Product name		ER		
1.2. Relevant identified uses of the substance or n	nixture and	uses advised against		
Intended use	ANTI-MOU	ULD BIOCIDE		
1.3. Details of the supplier of the safety data sheet	:			
Name	NORD RE	SINE S.p.A.		
Full address		ice Vecchia, 79		
District and Country	31058	Susegana Italia	(TV)	
	Tel.	+39 0438-437511		
a mail address of the compotent person	Fax	+39 0438-435155		
e-mail address of the competent person responsible for the Safety Data Sheet	annabred	a@nordresine.com		
Supplier:	NORD RE	SINE S.p.A.		

#### 1.4. Emergency telephone number

For urgent inquiries refer to

# **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 2020/878.

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

+39 0438 437511

Hazard classification and indication:		
Skin sensitization, category 1A	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic	H411	Toxic to aquatic life with long lasting effects.
toxicity, category 2		

# 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: H317 H411

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

Precautionary statements:



Revision nr.12 Dated 25/05/2023 Printed on 26/05/2023 Page n. 2 / 10 Replaced revision:11 (Dated 11/04/2023)

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

P280	Wear protective gloves.
P273	Avoid release to the environment.
P391	Collect spillage.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
Contains:	2-N-OCTYL-4-ISOTHIAZOLIN-3-ONE

Product not intended for uses provided for by Directive 2004/42/EC.

# 2.3. Other hazards

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration  $\geq 0.1\%$ .

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

x = Conc. %

#### 3.2. Mixtures

Contains:

Identification

Classification (EC) 1272/2008 (CLP)

Quaternar	Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides				
INDEX		0 ≤ x < 0,25	Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Aquatic Acute 1		
			H400 M=10, Aquatic Chronic 1 H410 M=1		
EC	270-325-2		STA Oral: 500 mg/kg		
CAS	68424-85-1				
2-N-OCTY	L-4-ISOTHIAZOLIN-3	-ONE			
INDEX	613-112-00-5	0,0025 ≤ x <  0,025	Acute Tox. 2 H330, Acute Tox. 3 H301, Acute Tox. 3 H311, Skin Corr. 1 H314,		
			Eye Dam. 1 H318, Eye Dam. 1 H318, Skin Sens. 1A H317, Aquatic Acute 1		
			H400 M=100, Aquatic Chronic 1 H410 M=100, EUH071		
EC	247-761-7		Skin Sens. 1A H317: ≥ 0,0015%		
CAS	26530-20-1		STA Oral: 100 mg/kg, STA Oral: 500 mg/kg, STA Dermal: 300 mg/kg, STA		
			Inhalation vapours: 0,501 mg/l, STA Inhalation mists/powders: 0,051 mg/l,		
			STA Inhalation vapours: 3 mg/l, STA Inhalation mists/powders: 0,501 mg/l		

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.

# 5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products.

### 5.3. Advice for firefighters

# GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations. SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

# **SECTION 6.** Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

### 6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

### 6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

### 6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

# **SECTION 7. Handling and storage**

### 7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

### 7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

# 7.3. Specific end use(s)

Information not available



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

# 8.1. Control parameters

Information not available

# 8.2. Exposure controls

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

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

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

Provide an emergency shower with face and eye wash station.

HAND PROTECTION

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): 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 B 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.

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

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

Properties		Value	Information
Appearance		liquid	
Colour		green	
Odour		odourless	
Melting point / freezing point		not available	
Initial boiling point		not available	
Flammability		not available	
Lower explosive limit		not available	
Upper explosive limit		not available	
Flash point	>	100 °C	
Auto-ignition temperature		not available	
Decomposition temperature		not available	
рН		7,6	
Kinematic viscosity		not available	
Solubility		soluble in water	
Partition coefficient: n-octanol/water		not available	
Vapour pressure		not available	
Density and/or relative density		0,99 kg/l	
Relative vapour density		not available	
Particle characteristics		not applicable	



Revision nr.12 Dated 25/05/2023 Printed on 26/05/2023 Page n. 5 / 10 Replaced revision:11 (Dated 11/04/2023)

# SECTION 9. Physical and chemical properties .... / >>

# 9.2. Other information

9.2.1. Information with regard to physical hazard classes	
Information not available	
9.2.2. Other safety characteristics	

VOC (Directive 2010/75/EU)	0,01 % - 0,12	g/litre
VOC (volatile carbon)	< 0.01 % - 0,07	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.

### 10.2. Chemical stability

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

#### 10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

#### 10.4. Conditions to avoid

None in particular. However the usual precautions used for chemical products should be respected.

#### 10.5. Incompatible materials

Information not available

#### 10.6. Hazardous decomposition products

Information not available

# **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 hazard classes as defined in Regulation (EC) No 1272/2008

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

ATE (Inhalation) of the mixture: ATE (Oral) of the mixture: ATE (Dermal) of the mixture: Not classified (no significant component) Not classified (no significant component) Not classified (no significant component) EN



Revision nr.12 Dated 25/05/2023 Printed on 26/05/2023 Page n. 6 / 10 Replaced revision:11 (Dated 11/04/2023)

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

# 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

### 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

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

# 11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

# **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 acquatic environment.

#### 12.1. Toxicity

2-N-OCTYL-4-ISOTHIAZOLIN-3-ONE LC50 - for Fish EC50 - for Crustacea EC50 - for Algae / Aquatic Plants Chronic NOEC for Fish Chronic NOEC for Crustacea Chronic NOEC for Algae / Aquatic Plants

0,036 mg/l/96h Oncorhynchus mykiss 0,42 mg/l/48h Daphnia magna 0,084 mg/l/72h Desmodesmus subspicatus 0,022 mg/l Oncorhynchus mykiss 0,002 mg/l Daphnia magna 0,004 mg/l Algae

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chloridesLC50 - for Fish0,85 mg/l/96h Oncorhynchus mykissEC50 - for Crustacea0,016 mg/l/48h Daphnia magnaEC50 - for Algae / Aquatic Plants0,02 mg/l/72h Selenastrum capricornutumChronic NOEC for Crustacea0,025 mg/l Daphnia magna

#### 12.2. Persistence and degradability

Information not available

#### 12.3. Bioaccumulative potential



Revision nr.12 Dated 25/05/2023 Printed on 26/05/2023 Page n. 7 / 10 Replaced revision:11 (Dated 11/04/2023)

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

2-N-OCTYL-4-ISOTHIAZOLIN-3-ONE Partition coefficient: n-octanol/water	2,92
Quaternary ammonium compounds, benzyl-C12-16-alkyl	dimethyl, chlorides
Partition coefficient: n-octanol/water	2,47
BCF	79

# 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  $\geq$  than 0,1%.

### 12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

# 12.7. 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 or ID number

ADR / RID, IMDG, IATA: 3082

ADR / RID:	In accordance with Special Provision 375, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to ADR provisions.
IMDG:	In accordance with Section 2.10.2.7 of IMDG Code, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IMDG Code provisions.
IATA:	In accordance with SP A197, this product, when is packed in receptacles of a capacity ≤ 5Kg or 5L, is not submitted to IATA dangerous goods regulations.

#### 14.2. UN proper shipping name

ADR / RID:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds,
	benzyl-C12-16-alkyldimethyl, chlorides; 2-N-OCTYL-4-ISOTHIAZOLIN-3-ONE)
IMDG:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds,
	benzyl-C12-16-alkyldimethyl, chlorides; 2-N-OCTYL-4-ISOTHIAZOLIN-3-ONE)
IATA:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds,
	benzyl-C12-16-alkyldimethyl, chlorides; 2-N-OCTYL-4-ISOTHIAZOLIN-3-ONE)



ΕN

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

# 14.3. Transport hazard class(es)

14.3. Transport ha	azard class(es)		•
ADR / RID:	Class: 9	Label: 9	
IMDG:	Class: 9	Label: 9	
IATA:	Class: 9	Label: 9	

# 14.4. Packing group

ADR / RID, IMDG, IATA: III

# 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	Limited Quantities: 5 L	Tunnel restriction code: (-)
	Special provision: -		
IMDG:	EMS: F-A, S-F	Limited Quantities: 5 L	
IATA:	Cargo:	Maximum quantity: 450 L	Packaging instructions: 964
	Passengers:	Maximum quantity: 450 L	Packaging instructions: 964
	Special provision:	A97, A158, A197, A215	

# 14.7. Maritime transport in bulk according to IMO instruments

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/EU:

E2

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

Product Point 3 Contained substance Point 75

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors not applicable

Substances in Candidate List (Art. 59 REACH) On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:



ΕN

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

### None

Substances subject to the Rotterdam Convention:

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:

Acute Tox. 2	Acute toxicity, category 2
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Skin Corr. 1	Skin corrosion, category 1
Eye Dam. 1	Serious eye damage, category 1
Skin Sens. 1A	Skin sensitization, category 1A
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
H330	Fatal if inhaled.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 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: 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: Regulation (EC) 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.



# NORD RESINE S.p.A.

002 - AM PRIMER

Revision nr.12 Dated 25/05/2023 Printed on 26/05/2023 Page n. 10 / 10 Replaced revision:11 (Dated 11/04/2023)

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

- TWA STEL: Short-term 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) 2020/878 (II Annex of REACH Regulation)
- 4. Regulation (EC) 790/2009 (I Atp. CLP) 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) 2019/521 (XII Atp. CLP)
- 16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)
- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- 22. Delegated Regulation (UE) 2022/692 (XVIII 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.

# CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review: The following sections were modified:

09 / 11 / 16.