

Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

1.1. Product identifier

Code: P10489
Product name: ResinFIP_Epobond_T160_COMP.B
UFI : HNS0-60MX-C00J-H5YR

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

Intended use: two -component epoxy resin: component B

1.3. Details of the supplier of the safety data sheet

Name: Licata S.p.A.
Full address: Via dei Mille 32
District and Country: 00185 Roma (RM)
Tel.: +39 0922 856088
Fax: +39 0922 831427
e-mail address of the competent person responsible for the Safety Data Sheet: controllo-qualita@licataspa.it

1.4. Emergency telephone number

For urgent inquiries refer to:
NHS111in England: 111
NHS24in Scotland: 111
NHS Direct in Wales: 111 or 0845 4647
In an emergency, if the patient has collapsed or is not breathing properly, call 999

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.

Hazard classification and indication:

Reproductive toxicity, category 1B	H360F	May damage fertility.
Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, acute toxicity, category 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment, chronic toxicity, category 1	H410	Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms:



P10489 - ResinFIP_Epobond_T160_COMP.B

SECTION 2. Hazards identification ... / >>

Signal words: Danger

Hazard statements:

H360F May damage fertility.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H317 May cause an allergic skin reaction.
H410 Very toxic to aquatic life with long lasting effects.
EUH071 Corrosive to the respiratory tract.
 Restricted to professional users.

Precautionary statements:

P260 Do not breathe dust / fume / gas / mist / vapours / spray.
P201 Obtain special instructions before use.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P280 Wear protective gloves/ protective clothing / eye protection / face protection.
P310 Immediately call a POISON CENTER / doctor / . . .

Contains:

Alchilfenolo
 M-PHENYLENEBIS (METHYLAMINE)
 Polymeric reaction
 products of
 formaldehyde and 4-
 nonylphenol and
 triethylenetetramine
 and 2-piperazin-1-
 ylethylamine
 N-Aminoethylpiperazine
 FELDSPATO
 BENZYL ALCOHOL

The product is classified both in acute and long-term aquatic hazard categories: it is possible to use only hazard statement H410 on the label.

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 contains substances with endocrine disrupting properties in concentration \geq 0,1%:
 Alchilfenolo

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
FELDSPATO		
INDEX	$30 \leq x < 32,5$	Eye Irrit. 2 H319, STOT SE 3 H335
EC 270-666-7		
CAS 68476-25-5		
M-PHENYLENEBIS (METHYLAMINE)		
INDEX	$13,5 \leq x < 15$	Acute Tox. 4 H302, Acute Tox. 4 H332, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1B H317, Aquatic Chronic 3 H412, EUH071
EC 216-032-5		LD50 Oral: 930 mg/kg, ATE Inhalation vapours: 11 mg/l
CAS 1477-55-0		
REACH Reg. 01-2119480150-50-XXXX		

SECTION 3. Composition/information on ingredients ... / >>

Polymeric reaction
products of
formaldehyde and 4-
nonylphenol and
triethylenetetramine
and 2-piperazin-1-
ylethylamine

INDEX 7 ≤ x < 8
EC 922-006-0
CAS

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

QUARTZ

INDEX 6 ≤ x < 7
EC 238-878-4
CAS 14808-60-7

Substance with a community workplace exposure limit.

BENZYL ALCOHOL

INDEX 5 ≤ x < 6
EC 603-057-00-5
EC 202-859-9
CAS 100-51-6
REACH Reg. 01-2119492630-38-XXXX

Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Sens. 1B H317
LD50 Oral: 1620 mg/kg

N-Aminoethylpiperazine

INDEX 4 ≤ x < 5
EC 612-105-00-4

Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Chronic 3 H412
ATE Oral: 500 mg/kg, ATE Dermal: 1100 mg/kg

EC 205-411-0
CAS 140-31-8
REACH Reg. 01-2119471486-30-XXXX

Alchilfenolo

INDEX 3 ≤ x < 4
EC 604-092-00-9

Repr. 1B H360F, Skin Corr. 1C H314, Eye Dam. 1 H318, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=10

EC 310-154-3
CAS 121158-58-5
REACH Reg. 01-2119513207-49-XXXX

QUARTZ

INDEX 0,3 ≤ x < 0,35
EC 238-878-4
CAS 14808-60-7

STOT RE 1 H372

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

In case of doubt or in the presence of symptoms contact a doctor and show him this document.

In case of more severe symptoms, ask for immediate medical aid.

EYES: Remove, if present, contact lenses if the situation allows you to do so easily. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. Get medical advice/attention.

SKIN: Take off immediately all contaminated clothing. Wash immediately and thoroughly with running water (and soap if possible). Get medical advice/attention. Avoid further contact with contaminated clothing.

INGESTION: Do not induce vomiting unless explicitly authorised by a doctor. Rinse your mouth with running water. Do not give anything by mouth to an unconscious person. Get medical advice/attention.

INHALATION: Remove victim to fresh air, away from the accident scene. In the event of respiratory symptoms (coughing, wheezing, breathing difficulty, asthma) keep the victim in a comfortable position for breathing. If necessary administer oxygen. If the subject stops breathing, administer artificial respiration. Get medical advice/attention.

Rescuer protection

It is good practice for rescuers lending support to a person who has been exposed to a chemical substance or to a mixture to wear personal protective equipment. The nature of such protection depends on the hazard level of the substance or mixture, on the type of exposure and on the extent of the contamination. In the absence of other more specific indications, use of disposable gloves in the event of possible contact with body fluids is recommended. For the type of PPE suitable for the characteristics of the substance or mixture, see section 8.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

DELAYED EFFECTS: Based on the information currently available, there are no known cases of delayed effects following exposure to this product.

SECTION 4. First aid measures ... / >>**4.3. Indication of any immediate medical attention and special treatment needed**

Immediately call a POISON CENTER / doctor / . . .

Means to have available in the workplace for specific and immediate treatment

Running water for skin and eye wash.

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.

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

M-PHENYLENEBIS (METHYLAMINE)

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
VLEP	FRA		0,1	
MV	SVN	0,1		
TLV-ACGIH			0,018 (C)	SKIN

Predicted no-effect concentration - PNEC

Normal value in fresh water	0,094	mg/l
Normal value in marine water	0,0094	mg/l
Normal value for fresh water sediment	12,4	mg/kg
Normal value for marine water sediment	1,24	mg/kg
Normal value for water, intermittent release	0,152	mg/l
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	2,44	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute	Acute	Chronic	Chronic	Acute	Acute	Chronic	Chronic
	local	systemic	local	systemic	local	systemic	local	systemic
Inhalation							0,2	1,2
							mg/m3	mg/m3
Skin								0,33
								mg/kg
								bw/d

QUARTZ

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
VLA	ESP		0,05	RESP
VLEP	FRA	0,1		RESP
GVI/KGVI	HRV	0,1		
VLEP	ITA	0,1		RESP
MV	SVN	0,15		RESP
OEL	EU	0,1		RESP
TLV-ACGIH		0,025		RESP

QUARTZ

Threshold Limit Value

Type	Country	TWA/8h	STEL/15min	Remarks / Observations
		mg/m3	ppm	
VLA	ESP		0,05	RESP
VLEP	FRA	0,1		RESP
GVI/KGVI	HRV	0,1		
VLEP	ITA	0,1		RESP
MV	SVN	0,15		RESP
OEL	EU	0,1		RESP
TLV-ACGIH		0,025		RESP

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

BENZYL ALCOHOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
AGW	DEU	22	5	44	10	SKIN	11
MAK	DEU	22	5	44	10	SKIN	
MV	SVN	22	5	44	10	SKIN	

Predicted no-effect concentration - PNEC

Normal value in fresh water	1	mg/l
Normal value in marine water	0,1	mg/l
Normal value for fresh water sediment	5,27	mg/kg/d
Normal value for marine water sediment	0,527	mg/kg/d
Normal value for water, intermittent release	2,31	mg/l
Normal value for marine water, intermittent release	2,3	mg/l
Normal value of STP microorganisms	39	mg/l
Normal value for the terrestrial compartment	0,456	mg/kg

Health - Derived no-effect level - DNEL / DMEL

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral	VND	20 mg/kg/d	VND	4 mg/kg/d				
Inhalation		27 mg/m3		5,4 mg/m3	VND	110 mg/mq	VND	22 mg/mq
Skin	VND	20 mg/kg/d	VND	4 mg/kg/d	VND	40 mg/kg/d	VND	8 mg/kg

Legend:

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

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

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, permeability time.

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 ISO 16321).

RESPIRATORY PROTECTION

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. 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).

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

Appearance	not available
Colour	not available
Odour	not available
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	not available
Auto-ignition temperature	not available
Decomposition temperature	not available
pH	12
Kinematic viscosity	not available
Solubility	not available
Partition coefficient: n-octanol/water	not available
Vapour pressure	not available
Density and/or relative density	1,63
Relative vapour density	not available
Particle characteristics	not applicable

Supplementary information for nanoforms

AMORPHOUS SILICATE HYDRATE (nanoform)

Denomination	CAB-O-SIL M-5
Other identifier	Biossido di silicio, Silice sintetica Amorfa

Shape

Shape 1:

Category	spheroidal	
Shape	spherical	
D10	7 - 15	nm
D50	2 - 30	nm
D90	10 - 35	nm
Specific surface area by mass	50 - 450	m2/g

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)	21,96 % - 358,26	g/litre
VOC (volatile carbon)	4,47 % - 72,99	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-Aminoethylpiperazine

Stable in normal conditions of use and storage.

BENZYL ALCOHOL

Decomposes at temperatures above 870°C/1598°F. Possibility of explosion.

10.2. Chemical stability

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

N-Aminoethylpiperazine

Stable in normal conditions of use and storage.

QUARTZ

Stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

SECTION 10. Stability and reactivity ... / >>

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

BENZYL ALCOHOL

May react dangerously with: hydrobromic acid, iron, oxidising agents, sulphuric acid. Risk of explosion on contact with: phosphorus trichloride.

10.4. Conditions to avoid

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

QUARTZ

Decomposes if exposed to: sources of heat.

BENZYL ALCOHOL

Avoid exposure to: air, sources of heat, naked flames.

10.5. Incompatible materials**N-Aminoethylpiperazine**

Incompatible with: oxidising agents, metals, Nitrous acid, nitric acid, Other nitrogen-forming agents, Combustible material.

QUARTZ

Incompatible with: Oxidants.

BENZYL ALCOHOL

Incompatible with: sulphuric acid, oxidising substances, aluminium.

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**N-Aminoethylpiperazine**

- 2-piperazin-1-ylethylamine (CAS 140-31-8):

Test: LD50 - Via: Skin - Species: Rabbit = 866-1260 mg / kg

Test: LD50 - Via: Oral - Species: Rat = 1470 to 2140 mg / kg

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 - vapours) of the mixture:	> 20 mg/l
ATE (Oral) of the mixture:	>2000 mg/kg
ATE (Dermal) of the mixture:	>2000 mg/kg

Corrosive to the respiratory tract.

Alchilfenolo

LD50 (Dermal):	15000 mg/kg Rabbit
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LD50 (Oral):	2140 mg/kg Rat
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SECTION 11. Toxicological information ... / >>

N-Aminoethylpiperazine

LD50 (Dermal):

866 mg/kg Rabbit

ATE (Dermal):

1100 mg/kg estimate from table 3.1.2 of Annex I of the CLP
(figure used for calculation of the acute toxicity estimate of the mixture)

LD50 (Oral):

2140 mg/kg Rat

ATE (Oral):

500 mg/kg estimate from table 3.1.2 of Annex I of the CLP
(figure used for calculation of the acute toxicity estimate of the mixture)

M-PHENYLENEBIS (METHYLAMINE)

LD50 (Dermal):

> 3100 mg/kg Rat

LD50 (Oral):

930 mg/kg Rat - Sprague-Dawley

LC50 (Inhalation vapours):

1,34 mg/l/4h Ratto

ATE (Inhalation vapours):

11 mg/l estimate from table 3.1.2 of Annex I of the CLP
(figure used for calculation of the acute toxicity estimate of the mixture)

AMORPHOUS SILICATE HYDRATE

LD50 (Dermal):

> 2000 mg/kg Ratto

LD50 (Oral):

> 5000 mg/kg Ratto

LC50 (Inhalation mists/powders):

> 2,2 mg/l/1h Ratto

BENZYL ALCOHOL

LD50 (Dermal):

2000 mg/kg Rabbit

LD50 (Oral):

1620 mg/kg Rat

LC50 (Inhalation vapours):

> 4,178 mg/l/4h Rat

FELDSPATO

LD50 (Dermal):

> 2000 mg/kg Rat

LD50 (Oral):

> 2000 mg/kg Rat

LC50 (Inhalation mists/powders):

> 5,07 mg/l Rat

MINEMA 1-2-44

LD50 (Oral):

> 5000 mg/kg Ratto

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

May damage fertility

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 11. Toxicological information ... / >>

11.2. Information on other hazards

Based on the available data, the product contains the following endocrine disruptors in concentrations of 0.1% or greater by weight that may have endocrine disrupting effects on humans and cause adverse effects on the exposed individual or his or her progeny:
 Alchilfenolo

SECTION 12. Ecological information

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

12.1. Toxicity

N-Aminoethylpiperazine
 - 2-piperazin-1-ylethylamine (CAS 140-31-8):

Test: LC50 - Species: Fish - h Duration: 96 - mg / l: 1800
 Te t: EC50 - Species: Daphnia - h Duration: 48 - mg / l: 58
 Test: LC50 - Species: Algae - h Duration: 72 - mg / l: 494
 Test: EC50 - Species: Algae - mg / l: 1000

Alchilfenolo	
LC50 - for Fish	40 mg/l/96h
EC50 - for Crustacea	0,065 mg/l/48h
EC50 - for Algae / Aquatic Plants	0,36 mg/l/72h
EC10 for Crustacea	0,056 mg/l/48h
EC10 for Algae / Aquatic Plants	0,07 mg/l/72h
Chronic NOEC for Fish	25 mg/l
Chronic NOEC for Crustacea	0,011 mg/l
Chronic NOEC for Algae / Aquatic Plants	0,07 mg/l

N-Aminoethylpiperazine	
LC50 - for Fish	2190 mg/l/96h
EC50 - for Crustacea	58 mg/l/48h
EC50 - for Algae / Aquatic Plants	1000 mg/l/72h
LC10 for Fish	1030 mg/l/96h
Chronic NOEC for Fish	1030 mg/l
Chronic NOEC for Crustacea	10 mg/l

M-PHENYLENEBIS (METHYLAMINE)	
LC50 - for Fish	87,6 mg/l/96h Oryzias latipes
EC50 - for Crustacea	15,2 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	26,8 mg/l/72h
Chronic NOEC for Crustacea	4,7 mg/l
Chronic NOEC for Algae / Aquatic Plants	16,7 mg/l

AMORPHOUS SILICATE HYDRATE	
LC50 - for Fish	> 10000 mg/l/96h

BENZYL ALCOHOL	
LC50 - for Fish	460 mg/l/96h
EC50 - for Crustacea	230 mg/l/48h Daphnia magna
EC50 - for Algae / Aquatic Plants	770 mg/l/72h
Chronic NOEC for Crustacea	51 mg/l Daphnia magna

MINEMA 1-2-44	
LC50 - for Fish	> 10000 mg/l/96h
EC50 - for Crustacea	> 1000 mg/l/48h
EC50 - for Algae / Aquatic Plants	75 mg/l/72h

12.2. Persistence and degradability

Alchilfenolo	
Solubility in water	1,54 mg/l
NOT rapidly degradable	

SECTION 12. Ecological information ... / >>

N-Aminoethylpiperazine	
Solubility in water	100000 mg/l
NOT rapidly degradable	
M-PHENYLENEBIS (METHYLAMINE)	
Solubility in water	100 mg/l
NOT rapidly degradable	
AMORPHOUS SILICATE HYDRATE	
Degradability: information not available	Sostanza inorganica
QUARTZ	
Degradability: information not available	
QUARTZ	
Degradability: information not available	
BENZYL ALCOHOL	
Rapidly degradable	
FELDSPATO	
Degradability: information not available	Sostanza inorganica
MINEMA 1-2-44	
Solubility in water	14 mg/l
Degradability: information not available	Sostanza inorganica

12.3. Bioaccumulative potential

Alchilfenolo	
Partition coefficient: n-octanol/water	7,14 Log Kow
BCF	823
N-Aminoethylpiperazine	
Partition coefficient: n-octanol/water	-1,48 Log Kow
M-PHENYLENEBIS (METHYLAMINE)	
Partition coefficient: n-octanol/water	0,18 Log Kow

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 contains the following endocrine disruptors in concentrations of 0.1% or greater by weight that may have endocrine disrupting effects on the environment and on animal species causing adverse effects on the exposed organisms or on their progeny:
Alchilfenolo

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: UN 3267

14.2. UN proper shipping name

ADR / RID: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (M-PHENYLENEBIS (METHYLAMINE) ; Polymeric reaction products of formaldehyde and 4-nonylphenol and triethylenetetramine and 2-piperazin-1-ylethylamine)

IMDG: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (M-PHENYLENEBIS (METHYLAMINE) ; Polymeric reaction products of formaldehyde and 4-nonylphenol and triethylenetetramine and 2-piperazin-1-ylethylamine; Alchilfenolo)

IATA: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (M-PHENYLENEBIS (METHYLAMINE) ; Polymeric reaction products of formaldehyde and 4-nonylphenol and triethylenetetramine and 2-piperazin-1-ylethylamine)

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

14.5. Environmental hazards

ADR / RID: Environmentally Hazardous



IMDG: Marine Pollutant



IATA: NO

For Air transport, environmentally hazardous mark is only mandatory for UN 3077 and UN 3082.

SECTION 14. Transport information ... / >>

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: 80	Limited Quantities: 1 lt	Tunnel restriction code: (E)
	Special provision: 274		
IMDG:	EMS: F-A, S-B	Limited Quantities: 1 lt	
IATA:	Cargo:	Maximum quantity: 30 L	Packaging instructions: 855
	Passengers:	Maximum quantity: 1 L	Packaging instructions: 851
	Special provision:	A3, A803	

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: E1

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

Product		
Point	3	
Contained substance		
Point	75	
Point	30	Alchilfenolo
		REACH Reg.: 01-2119513207-49-XXXX

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

Substances in Candidate List (Art. 59 REACH)

Alchilfenolo

REACH Reg.: 01-2119513207-49-XXXX

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 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

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:

Repr. 1B	Reproductive toxicity, category 1B
Acute Tox. 4	Acute toxicity, category 4
STOT RE 1	Specific target organ toxicity - repeated exposure, category 1
Skin Corr. 1B	Skin corrosion, category 1B
Skin Corr. 1C	Skin corrosion, category 1C
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1B	Skin sensitization, category 1B

SECTION 16. Other information ... / >>

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
H360F	May damage fertility.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H317	May cause an allergic skin reaction.
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.
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
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PMT: Persistent, mobile and toxic
- 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.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very persistent and very bioaccumulative
- vPvM: Very persistent and very mobile
- 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)

SECTION 16. Other information ... / >>

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)
23. Delegated Regulation (UE) 2023/707
24. Delegated Regulation (UE) 2023/1434 (XIX Atp. CLP)
24. Delegated Regulation (UE) 2023/1435 (XX 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:

01 / 02 / 03 / 08 / 09 / 10 / 11 / 12 / 14 / 15 / 16.