

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****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: **P10447**  
 Product name: **ResinFIP\_EPOBOND\_F130\_COMP-B**  
 UFI: **X4P0-F0AN-T008-D633**

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

Intended use: **THIXOTROPIC AMINO HARDENER**

**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) Italia**  
 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:  
**NHS111 in England: 111**  
**NHS24 in 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	H360FD	May damage fertility. May damage the unborn child.
Acute toxicity, category 4	H302	Harmful if swallowed.
Skin corrosion, category 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage, category 1	H318	Causes serious eye damage.
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:



**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 2. Hazards identification** ... / >>

Signal words: Danger

Hazard statements:

**H360FD** May damage fertility. May damage the unborn child.  
**H302** Harmful if swallowed.  
**H314** Causes severe skin burns and eye damage.  
**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  
 N-Aminoethylpiperazine  
 Triethylenetetramine  
 M-PHENYLENEBIS (METHYLAMINE)

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.

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 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)
<b>M-PHENYLENEBIS (METHYLAMINE)</b>		
INDEX	$16,5 \leq x < 18$	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 LD50 Oral: 930 mg/kg, ATE Inhalation vapours: 11 mg/l
EC	216-032-5	
CAS	1477-55-0	
REACH Reg.	01-2119480150-50-XXXX	
<b>2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL</b>		
INDEX	$7 \leq x < 8$	Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315 ATE Oral: 500 mg/kg
EC	202-013-9	
CAS	90-72-2	
<b>Triethylenetetramine</b>		
INDEX	$6 \leq x < 7$	Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Chronic 3 H412 LD50 Oral: 1716 mg/kg, LD50 Dermal: 1465 mg/kg
EC	292-588-2	
CAS	90640-67-8	
REACH Reg.	01-2119487919-13-xxxx	

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 3. Composition/information on ingredients** ... / >>**Alchilfenolo**

INDEX 604-092-00-9 5 ≤ x &lt; 6

Repr. 1B H360FD, 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

**N-Aminoethylpiperazine**

INDEX 612-105-00-4 5 ≤ x &lt; 6

Repr. 2 H361, Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Chronic 3 H412

EC 205-411-0

CAS 140-31-8

REACH Reg. 01-2119471486-30-XXXX

**DIPROPYLENE GLYCOL MONOMETHYL ETHER**

INDEX 252-104-2 0,708 ≤ x &lt; 0,808

Substance with a community workplace exposure limit.

EC 252-104-2

CAS 34590-94-8

REACH Reg. 01-2119450011-60-XXXX

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.

**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.

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 5. Firefighting measures** ... / >>**5.2. Special hazards arising from the substance or mixture**

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

**5.3. Advice for firefighters**

## GENERAL INFORMATION

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

## SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

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

**SECTION 6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.

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

**6.2. Environmental precautions**

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

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

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

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

**6.4. Reference to other sections**

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

**SECTION 7. Handling and storage****7.1. Precautions for safe handling**

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**

Regulatory references:

DEU	Deutschland	Forschungsgemeinschaft MAK- und BAT-Werte-Liste 2022 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe Mitteilung 58
ESP	España	Límites de exposición profesional para agentes químicos en España 2023
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France Décret n° 2021-1849 du 28 décembre 2021
HRV	Hrvatska	Pravilnik o izmjenama i dopunama Pravilnika o zaštiti radnika od izloženosti opasnim kemikalijama

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 8. Exposure controls/personal protection ... />>**

ITA	Italia	na radu, graničnim vrijednostima izloženosti i biološkim graničnim vrijednostima (NN 1/2021)
SVN	Slovenija	Decreto Legislativo 9 Aprile 2008, n.81
GBR	United Kingdom	Pravilnik o varovanju delavcev pred tveganji zaradi izpostavljenosti kemičnim snovem pri delu (Uradni list RS, št. 100/01, 39/05, 53/07, 102/10, 43/11 – ZVZD-1, 38/15, 78/18 in 78/19)
EU	OEL EU	EH40/2005 Workplace exposure limits (Fourth Edition 2020)
	TLV-ACGIH	Directive (EU) 2022/431; Directive (EU) 2019/1831; Directive (EU) 2019/130; Directive (EU) 2019/983; Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive 2004/37/EC; Directive 2000/39/EC; Directive 98/24/EC; Directive 91/322/EEC.
		ACGIH 2023

**Alchilfenolo****Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,074	mg/l
Normal value in marine water	0,0074	mg/l
Normal value for fresh water sediment	0,226	mg/kg/d
Normal value for marine water sediment	0,0266	mg/kg/d
Normal value for water, intermittent release	0,37	mg/l
Normal value of STP microorganisms	100	mg/l
Normal value for the food chain (secondary poisoning)	4	mg/kg
Normal value for the terrestrial compartment	0,118	mg/kg/d

**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						1,26 mg/kg bw/d		0,075 mg/kg bw/d
Inhalation		13,26 mg/m3		0,790 mg/m3		44,18 mg/m3		
Skin		50 mg/kg bw/d		0,075 mg/kg bw/d		166 mg/kg bw/d		0,250 mg/kg bw/d

**N-Aminoethylpiperazine****Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,058	mg/l
Normal value in marine water	0,0058	mg/l
Normal value for fresh water sediment	215	mg/kg
Normal value for marine water sediment	21,5	mg/kg
Normal value for marine water, intermittent release	0,58	mg/l
Normal value of STP microorganisms	250	mg/l
Normal value for the terrestrial compartment	1	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
Inhalation					0,08 mg/m3	10,6 mg/m3	0,015 mg/m3	10,6 mg/m3
Skin								3,33 mg/kg bw/d

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 8. Exposure controls/personal protection ... / >>****Triethylenetetramine****Predicted no-effect concentration - PNEC**

Normal value in fresh water	0,19	mg/l
Normal value in marine water	0,038	mg/l
Normal value for fresh water sediment	95,9	mg/kg
Normal value for marine water sediment	19,2	mg/kg
Normal value for the terrestrial compartment	19,1	mg/kg

**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			VND	0,29 mg/m3			1 mg/m3	VND
Skin			VND	0,25 mg/kg/d			VND	0,57 mg/kg/d

**M-PHENYLENEBIS (METHYLAMINE)****Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	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 mg/m3	1,2 mg/m3
Skin								0,33 mg/kg bw/d

## SECTION 8. Exposure controls/personal protection ... / &gt;&gt;

## DIPROPYLENE GLYCOL MONOMETHYL ETHER

## Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
AGW	DEU	310	50	310	50	11
MAK	DEU	310	50	310	50	
VLA	ESP	308	50			SKIN
VLEP	FRA	308	50			SKIN
GVI/KGVI	HRV	308	50			SKIN
VLEP	ITA	308	50			SKIN
MV	SVN	308	50			SKIN
WEL	GBR	308	50			SKIN
OEL	EU	308	50			SKIN
TLV-ACGIH			50			

## Predicted no-effect concentration - PNEC

Normal value in fresh water	19	mg/l
Normal value in marine water	1,9	mg/l
Normal value for fresh water sediment	70,2	mg/kg
Normal value for marine water sediment	7,02	mg/kg
Normal value for water, intermittent release	190	mg/l
Normal value of STP microorganisms	4168	mg/l
Normal value for the terrestrial compartment	2,74	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				36				
				mg/kg bw/d				
Inhalation				37,2				308
				mg/m3				mg/m3
Skin				121				283
				mg/kg bw/d				mg/kg bw/d

## 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

## Predicted no-effect concentration - PNEC

Normal value in fresh water	0,046	mg/l
Normal value in marine water	0,0046	mg/l
Normal value for fresh water sediment	0,2621	mg/kg/d
Normal value for marine water sediment	0,02621	mg/kg/d
	1	
Normal value for water, intermittent release	0,46	mg/l
Normal value for fresh water, intermittent release	0,046	mg/l
Normal value of STP microorganisms	0,2	mg/l
Normal value for the terrestrial compartment	0,0254	mg/kg/d

## 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				0,075				
				mg/kg bw/d				
Inhalation		0,130		0,130	2,1	2,1	2,1	0,530
		mg/m3		mg/m3		mg/m3		mg/m3
Skin		0,075		0,075	0,600	0,600	0,600	0,150
		mg/kg bw/d		mg/kg bw/d		mg/kg bw/d		mg/kg bw/d

## 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.

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 8. Exposure controls/personal protection ... / >>****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).

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

**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
Appearance	not available	
Colour	not available	
Odour	not available	
Melting point / freezing point	not available	
Initial boiling point	> 100 °C	
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	
pH	7-9	Method:pHmetro Mettler Toledo
Kinematic viscosity	not available	
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	1,35	
Relative vapour density	not available	
Particle characteristics	not applicable	

**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) 24,70 % - 333,45 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.

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Forms peroxides with: air.

**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.

**10.3. Possibility of hazardous reactions**

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

DIPROPYLENE GLYCOL MONOMETHYL ETHER

May react violently with: strong oxidising agents.

**10.4. Conditions to avoid**

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

DIPROPYLENE GLYCOL MONOMETHYL ETHER

Avoid exposure to: sources of heat.Possibility of explosion.

**10.5. Incompatible materials**

N-Aminoethylpiperazine

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

**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

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 11. Toxicological information ... / >>**

ATE (Inhalation - vapours) of the mixture: > 20 mg/l  
ATE (Oral) of the mixture: 1944,24 mg/kg  
ATE (Dermal) of the mixture: >2000 mg/kg

Corrosive to the respiratory tract.

Alchilfenolo  
LD50 (Dermal): 15000 mg/kg Rabbit  
LD50 (Oral): 2140 mg/kg Rat

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)

Triethylenetetramine  
LD50 (Dermal): 1465 mg/kg Rabbit  
LD50 (Oral): 1716 mg/kg Rat

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)

KAOLIN  
LD50 (Dermal): > 2000 mg/kg Ratto  
LD50 (Oral): > 2000 mg/kg Ratto  
LC50 (Inhalation mists/powders): > 5,07 mg/l/4h Ratto

DIPROPYLENE GLYCOL MONOMETHYL ETHER  
LD50 (Dermal): 9510 mg/kg Coniglio  
LD50 (Oral): > 5000 mg/kg Ratto  
LC50 (Inhalation vapours): 3,35 mg/l/7h Ratto

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL  
LD50 (Oral): 2169 mg/kg Ratto  
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)

MINEMA 2  
LD50 (Oral): > 5000 mg/kg Ratto

SKIN CORROSION / IRRITATION

Corrosive for the skin

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

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 11. Toxicological information ... / >>**

May damage fertility - May damage the unborn child

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 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

Triethylenetetramine

LC50 - for Fish	> 100 mg/l/96h Pimephales promelas
EC50 - for Crustacea	< 100 mg/l/48h Daphnia Magna
EC50 - for Algae / Aquatic Plants	< 100 mg/l/72h Pseudokirchneriella subcapitata

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

KAOLIN

LC50 - for Fish	> 1000 mg/l/96h
EC50 - for Crustacea	> 1000 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 1000 mg/l/72h

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 12. Ecological information ... / >>**

DIPROPYLENE GLYCOL MONOMETHYL ETHER  
LC50 - for Fish > 1000 mg/l/96h  
EC50 - for Crustacea 1919 mg/l/48h Pulce d'acqua grande  
Chronic NOEC for Crustacea > 0,5 mg/l Pulce d'acqua grande

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL  
LC50 - for Fish 100 mg/l/96h  
EC50 - for Crustacea 100 mg/l/48h  
EC50 - for Algae / Aquatic Plants 46,7 mg/l/72h  
LC10 for Fish 100 mg/l/96h  
EC10 for Crustacea 100 mg/l/48h  
EC10 for Algae / Aquatic Plants 25,1 mg/l/72h  
Chronic NOEC for Algae / Aquatic Plants 25,1 mg/l

MINEMA 2  
LC50 - for Fish > 10000 mg/l/96h  
EC50 - for Crustacea > 1000 mg/l/48h  
EC50 - for Algae / Aquatic Plants > 200 mg/l/72h

**12.2. Persistence and degradability**

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

N-Aminoethylpiperazine  
Solubility in water 100000 mg/l  
NOT rapidly degradable

M-PHENYLENEBIS (METHYLAMINE)  
Solubility in water 100 mg/l  
NOT rapidly degradable

KAOLIN  
Degradability: information not available Sostanza inorganica

DIPROPYLENE GLYCOL MONOMETHYL ETHER  
Rapidly degradable 75%

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL  
Solubility in water 850000 mg/l  
NOT rapidly degradable

MINEMA 2  
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

DIPROPYLENE GLYCOL MONOMETHYL ETHER  
Partition coefficient: n-octanol/water 0,006 Log Kow  
BCF < 100

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL  
Partition coefficient: n-octanol/water 0,66 Log Kow

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 12. Ecological information** ... / >>**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) ; 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

IMDG: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (M-PHENYLENEBIS (METHYLAMINE) ; 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL; Alchilfenolo)

IATA: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (M-PHENYLENEBIS (METHYLAMINE) ; 2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL)

**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

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 14. Transport information** ... / >>**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.

**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 applicableSubstances 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.

**P10447 - ResinFIP\_EPOBOND\_F130\_COMP-B****SECTION 16. Other information**

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

<b>Repr. 1B</b>	Reproductive toxicity, category 1B
<b>Repr. 2</b>	Reproductive toxicity, category 2
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Skin Corr. 1B</b>	Skin corrosion, category 1B
<b>Skin Corr. 1C</b>	Skin corrosion, category 1C
<b>Eye Dam. 1</b>	Serious eye damage, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Skin Sens. 1B</b>	Skin sensitization, category 1B
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3
<b>H360FD</b>	May damage fertility. May damage the unborn child.
<b>H361</b>	Suspected of damaging fertility or the unborn child.
<b>H302</b>	Harmful if swallowed.
<b>H312</b>	Harmful in contact with skin.
<b>H332</b>	Harmful if inhaled.
<b>H314</b>	Causes severe skin burns and eye damage.
<b>H318</b>	Causes serious eye damage.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.
<b>EUH071</b>	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**

**SECTION 16. Other information ... / >>**

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)
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:

02 / 03 / 11 / 15 / 16.