Safety Data Sheet

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

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

1.1. Product identifier

Code:	**0470224P**
Product name	**SYNTECH RGS COMP.B**
UFI :	**KTS0-60YU-W006-UJHH**

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

Intended use	**Epoxy adhesive for structural construction joints, brushable**

1.3. Details of the supplier of the safety data sheet

Name	**AZICHEM SRL**
Full address	**Via G. Gentile 16/A**
District and Country	**46044 Goito (Mantova)** **Italia** **Tel. 0376604185**
e-mail address of the competent person responsible for the Safety Data Sheet	**laboratorio@azichem.com**

1.4. Emergency telephone number

For urgent inquiries refer to	**Osp. Pediatrico Bambino Gesù ROMA: 06 68593726** **Az. Osp. Univ. Foggia FOGGIA: 800183459** **Az. Osp. "A. Cardarelli" NAPOLI: 081-5453333** **Policlinico "Umberto I" ROMA: 06-49978000** **Policlinico "A. Gemelli" ROMA: 06-3054343** **Az. Osp. "Careggi" U.O. Tossicologia Medica FIRENZE: 055-7947819** **Centro Nazionale di Informazione Tossicologica PAVIA: 0382-24444** **Osp. Niguarda Ca' Granda MILANO: 02-66101029** **Azienda Ospedaliera Papa Giovanni XXII BERGAMO: 800883300** **Azienda Ospedaliera Integrata VERONA: 800011858**

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:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Serious eye damage, category 1	H318	Causes serious eye damage.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 2	H411	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:

SECTION 2. Hazards identification ... / >>

Signal words: Danger

Hazard statements:

H226	Flammable liquid and vapour.
H318	Causes serious eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P280	Wear protective gloves/ protective clothing / eye protection / face protection.
P310	Immediately call a POISON CENTER / doctor / . . .
P370+P378	In case of fire: use . . . to extinguish.
P273	Avoid release to the environment.

Contains: Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine
3-(DIMETHYLAMINO) PROPYLAMINE
AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION

2.3. Other hazards

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

The product does not contain substances with endocrine disrupting properties in concentration ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification		x = Conc. %	Classification (EC) 1272/2008 (CLP)
Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine			
INDEX		54 ≤ x < 58	**Eye Dam. 1 H318, Skin Irrit. 2 H315, Skin Sens. 1A H317, Aquatic Chronic 2 H411**
EC	*500-191-5*		
CAS	*68082-29-1*		
BENZYL ALCOHOL			
INDEX	*603-057-00-5*	32,5 ≤ x < 35	**Acute Tox. 4 H302, Acute Tox. 4 H332**
EC	*202-859-9*		**LD50 Oral: 1230 mg/kg, ATE Inhalation vapours: 11 mg/l**
CAS	*100-51-6*		
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL			
INDEX	*603-069-00-0*	5 ≤ x < 6	**Acute Tox. 4 H302, Eye Irrit. 2 H319, Skin Irrit. 2 H315**
EC	*202-013-9*		**ATE Oral: 500 mg/kg**
CAS	*90-72-2*		
3-(DIMETHYLAMINO) PROPYLAMINE			
INDEX	*612-061-00-6*	3,5 ≤ x < 4	**Flam. Liq. 3 H226, Acute Tox. 4 H302, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317**
EC	*203-680-9*		**ATE Oral: 500 mg/kg**
CAS	*109-55-7*		
AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION			
INDEX		0,354 ≤ x < 0,404	**Acute Tox. 4 H302, Acute Tox. 4 H312, Skin Corr. 1B H314, Eye Dam. 1 H318, Skin Sens. 1 H317, Aquatic Chronic 3 H412, EUH071**
EC	*292-588-2*		**LD50 Oral: 1716,2 mg/kg, LD50 Dermal: 1465,4 mg/kg**
CAS	*90640-67-8*		
REACH Reg.	*01-2119487919-13-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. 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.

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

SECTION 6. Accidental release measures ... / >>

any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

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

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store only in the original container. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory references:

BGR	България	НАРЕДБА № 13 ОТ 30 ДЕКЕМВРИ 2003 Г. ЗА ЗАЩИТА НА РАБОТЕЩИТЕ ОТ РИСКОВЕ, СВЪРЗАНИ С ЕКСПОЗИЦИЯ НА ХИМИЧНИ АГЕНТИ ПРИ РАБОТА (изм. ДВ. бр.28 от 2 Април 2024г.)
DEU	Deutschland	WirkungDosisNOAELMAK-und BAT-Werte-Liste 2024 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe
POL	Polska	ROZPORZĄDZENIE MINISTRA RODZINY, PRACY I POLITYKI SPOŁECZNEJ z dnia 24 czerwca 2024 r. zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy

BENZYL ALCOHOL

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
TLV	BGR	5				
AGW	DEU	22	5	44	10	SKIN 11
MAK	DEU	22	5	44	10	SKIN
NDS/NDSCh	POL	240				

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

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,00434	mg/l
Normal value in marine water	0,000434	mg/l
Normal value for fresh water sediment	434,02	mg/kg
Normal value for marine water sediment	43,4	mg/kg
Normal value for marine water, intermittent release	0,0434	mg/l
Normal value of STP microorganisms	3,84	mg/l
Normal value for the terrestrial compartment	86,78	mg/kg
Normal value for the atmosphere	NPI	

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		NPI		0,0972 mg/kg bw/d				
Inhalation		NPI		0,169 mg/m3		NPI		0,952 mg/m3
Skin	HIGH		HIGH	0,0972 mg/kg bw/d	HIGH	NPI	HIGH	0,272 mg/kg bw/d

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,027	mg/l
Normal value in marine water	0,003	mg/l
Normal value for fresh water sediment	8,572	mg/kg/d
Normal value for marine water sediment	0,857	mg/kg/d
Normal value for marine water, intermittent release	0,2	mg/l
Normal value for fresh water, intermittent release	0,02	mg/l
Normal value of STP microorganisms	0,13	mg/l
Normal value for the terrestrial compartment	1,25	mg/kg/d

Health - Derived no-effect level - DNEL / DMEL

	Effects on consumers				Effects on workers			
Route of exposure	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Oral		LOW		0,14 mg/kg bw/d				
Inhalation	HIGH		HIGH	0,096 mg/m3	HIGH		HIGH	0,54 mg/m3
Skin	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH	HIGH

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.
Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.
EYE PROTECTION
Wear airtight protective goggles (see standard EN 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

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

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		liquid		
Colour		neutral		
Odour		characteristic		
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		53	°C	
Auto-ignition temperature		not available		
Decomposition temperature	>	150	°C	
pH		not available		
Kinematic viscosity		20,5		Temperature: 40 °C
Solubility		insoluble in water		
Partition coefficient: n-octanol/water		not available		
Vapour pressure		not available		
Density and/or relative density		1,4	g/cm3	
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)	38,80 %	-	543,20	g/litre
VOC (volatile carbon)	29,57 %	-	413,94	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.

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.

10.3. Possibility of hazardous reactions

The vapours may also form explosive mixtures with the air.

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

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

3-(DIMETHYLAMINO) PROPYLAMINE
Strong exothermic reaction with acids.

10.4. Conditions to avoid

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

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

3-(DIMETHYLAMINO) PROPYLAMINE
Avoid all sources of ignition: heat, sparks, open flames.

10.5. Incompatible materials

BENZYL ALCOHOL
Incompatible with: sulphuric acid,oxidising substances,aluminium.

3-(DIMETHYLAMINO) PROPYLAMINE
Copper, strong acids, nitrosating agents, oxidizing agents, brass

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
Acids, Chlorinated hydrocarbons, Cobalt, Copper, Copper alloys, Nickel, Oxidizing agents

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

3-(DIMETHYLAMINO) PROPYLAMINE
Carbon monoxide, Carbon dioxide, Nitrous gases

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
Anhydrous ammonia, aldehydes, nitrous oxide, carbon monoxide, carbon dioxide, ketones

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

SECTION 11. Toxicological information ... / >>

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

Corrosive to the respiratory tract.

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine
LD50 (Dermal): 2000 mg/kg Rat
LD50 (Oral): 2000 mg/kg Rat

BENZYL ALCOHOL
LD50 (Dermal): 2000 mg/kg Rabbit
LD50 (Oral): 1230 mg/kg Rat
LC50 (Inhalation vapours): > 4,1 mg/l/4h Rat
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)

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

3-(DIMETHYLAMINO) PROPYLAMINE
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)

Method: OECD 401
Reliability (Klimisch score): 1
Species: rat (Sprague-Dawley; male/female)
Routes of exposure: oral
Results: LD50 (male) = 442.7 mg/kg body weight; LD50 (female) = 377.1 mg/kg body weight

Based on the weight of evidence of available data determined by expert judgment, the substance is not classified for the hazard class of acute inhalation and dermal toxicity

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
LD50 (Dermal): 1465,4 mg/kg Rabbit (OECD 402)
LD50 (Oral): 1716,2 mg/kg Rat (equivalente o similare OECD 401)
Method: equivalent or similar to OECD 401
Reliability (Klimisch score): 1
Species: Rat (Male/Female Sprague-Dawley)
Routes of exposure: oral
LD50 results: 1591.4 mg/kg
The substance is classified as harmful orally Cat. 4

Method: OECD 402
Reliability (Klimisch score): 1
Species: White Rabbit (New Zealand Male/Female)
Routes of exposure: dermal
LD50 results: 1465.4 mg/kg
The substance is classified as harmful to the skin Cat. 4

SKIN CORROSION / IRRITATION

Causes skin irritation

3-(DIMETHYLAMINO) PROPYLAMINE
Method: OECD 404
Reliability (Klimisch score): 1
Species: rabbit (New Zealand White)
Routes of exposure: dermal
Results: corrosive

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
Method: OECD 404
Reliability (Klimisch score): 1
Species: Rabbit (New Zealand Withe)
Routes of exposure: dermal
Results: corrosive

SECTION 11. Toxicological information ... / >>

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye damage

3-(DIMETHYLAMINO) PROPYLAMINE
Method: BASF-Test
Reliability (Klimisch score): 2
Species: rabbit
Routes of exposure: ocular
Results: corrosive

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
Method: equivalent or similar to OECD 405
Reliability (Klimisch score): 1
Species: Rabbit (New Zealand Withe)
Routes of exposure: ocular
Results: corrosive

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Skin sensitization

3-(DIMETHYLAMINO) PROPYLAMINE
Method: OECD 429
Reliability (Klimisch score): 2
Species: mouse (CBA; female)
Routes of exposure: dermal
Results: sensitizing

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
Method: equivalent or similar to OECD 406
Reliability (Klimisch score): 1
Species: Guinea Pig (Hartley Male/Female)
Routes of exposure: dermal
Results: sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

3-(DIMETHYLAMINO) PROPYLAMINE
Method: OECD 473 - In vitro test
Reliability (Klimisch score): 1
Species: human lymphocytes
Results: negative with and without metabolic activation

Method: OECD 474
Reliability (Klimisch score): 1
Species: Mouse (NMRI; male/female)
Routes of exposure: intraperitoneal
Results: negative

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
Method: OECD 478 - In vitro test
Reliability (Klimisch score): 1
Species: human lymphocytes
Results: negative with and without metabolic activation

Method: equivalent or similar to OECD 474
Reliability (Klimisch score): 2
Species: Mouse (Swiss Webster; Male/Female)
Routes of exposure: intraperitoneal
Results: negative

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

SECTION 11. Toxicological information ... / >>

3-(DIMETHYLAMINO) PROPYLAMINE
Based on available data, the substance does not have carcinogenic effects and is not classified under the CLP hazard class of carcinogenicity.

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
Method: equivalent or similar to OECD 451
Reliability (Klimisch score): 2
Species: Mouse (CH3; Male)
Routes of exposure: dermal
Results: negative. NOAEL >= 20 mg/kg body weight/day

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Adverse effects on sexual function and fertility

3-(DIMETHYLAMINO) PROPYLAMINE
Method: OECD 443
Reliability (Klimisch score): 1
Species: rat (Sprague-Dawley; male/female)
Routes of exposure: oral
Results: negative. NOAEL (P0) = 450 mg/kg body weight/day; NOAEL (P1) = 450 mg/kg body weight/day; NOAEL (F1) = 450 mg/kg body weight/day; NOAEL (F2) = 450 mg/kg body weight/day

Adverse effects on development of the offspring

3-(DIMETHYLAMINO) PROPYLAMINE
Method: OECD 414
Reliability (Klimisch score): 1
Species: rabbit (New Zealand White)
Routes of exposure: oral
Results: negative. NOAEL (maternal) = 130 mg/kg body weight/day; NOAEL (fetus) = 130 mg/kg body weight/day

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
Method: OECD 414
Reliability (Klimisch score): 2
Species: Rat (albino, Sprague-Dawley)
Routes of exposure: oral
Results: negative. NOAEL (maternal) >= 750 mg/kg body weight/day; NOAEL (fetus) >= 750 mg/kg body weight/day

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

3-(DIMETHYLAMINO) PROPYLAMINE
Based on available data, the substance does not present specific target organ toxicity effects for single exposure and is not classified under the relevant CLP hazard class.

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
Based on available data, the substance does not present specific target organ toxicity effects for single exposure and is not classified under the relevant CLP hazard class.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

3-(DIMETHYLAMINO) PROPYLAMINE
Method: OECD 408
Reliability (Klimisch score): 1
Species: rat (Sprague-Dawley; male/female)
Routes of exposure: oral
Results: negative. NOAEL (male) >= 750 mg/kg body weight/day; NOAEL (female) = 250 mg/kg body weight/day

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
Based on available data, the substance does not present specific target organ toxicity effects upon repeated exposure and is not classified under the relevant CLP hazard class.

ASPIRATION HAZARD

SECTION 11. Toxicological information ... / >>

Does not meet the classification criteria for this hazard class

3-(DIMETHYLAMINO) PROPYLAMINE
There are no data available on the danger in case of aspiration.

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION
There are no data available on the danger in case of aspiration.

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.

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine
Repeated dose toxicity:
Oral:
NOAEL: 1 000 mg/kg bw/day (rat)

SECTION 12. Ecological information

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

12.1. Toxicity

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

LC50 - for Fish	7,07 mg/l/96h
EC50 - for Crustacea	7,07 mg/l/48h
EC50 - for Algae / Aquatic Plants	4,34 mg/l/72h
Chronic NOEC for Fish	5 mg/l (96h)
Chronic NOEC for Algae / Aquatic Plants	0,5 mg/l (72h)

3-(DIMETHYLAMINO) PROPYLAMINE

LC50 - for Fish	122 mg/l/96h Leuciscus idus melanotus (OECD 203)
EC50 - for Crustacea	59,46 mg/l/48h Daphnia magna (EU C.2)
EC50 - for Algae / Aquatic Plants	34 mg/l/72h Raphidocelis subcapitata (OECD 201)
Chronic NOEC for Crustacea	3,64 mg/l/22d Daphnia magna (OECD 211)
Chronic NOEC for Algae / Aquatic Plants	19,53 mg/l/72h Raphidocelis subcapitata (OECD 201)

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION

LC50 - for Fish	330 mg/l/96h Pimephales promelas (U.S EPA- TSCA, 40 CFR Part 797 1400)
EC50 - for Crustacea	31,1 mg/l/48h Daphnia magna (EU C.1)
EC50 - for Algae / Aquatic Plants	20 mg/l/72h Psuedokirchneriella subcapitata (OECD 201)
EC10 for Crustacea	1,9 mg/l/21d Daphnia magna, (riproduzione; OECD 202)
EC10 for Algae / Aquatic Plants	1,34 mg/l/72h Psuedokirchneriella subcapitata (OECD 201)

12.2. Persistence and degradability

Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine

Inherently degradable	In water (not fulfilling specific criteria)

BENZYL ALCOHOL
Rapidly degradable

2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL

Solubility in water	> 10000 mg/l

NOT rapidly degradable

3-(DIMETHYLAMINO) PROPYLAMINE

Rapidly degradable	65% in 20 giorni (F26-25)

AMINE, POLYETHYLENE POLY, TRIETHYLENETRAMIN FRACTION

NOT rapidly degradable	0% in 162 giorni (OECD 301 D)

12.3. Bioaccumulative potential

SECTION 12. Ecological information ... / >>

BENZYL ALCOHOL
Partition coefficient: n-octanol/water 1,1

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

3-(DIMETHYLAMINO) PROPYLAMINE
Partition coefficient: n-octanol/water 0,352 Log Kow T = 25 °C (equivalente o similare a OECD 107)

12.4. Mobility in soil

3-(DIMETHYLAMINO) PROPYLAMINE
Partition coefficient: soil/water 1,81 T = 25 °C, pH = 5 - 8 (Environ Toxicol Chem 28: 458-464)

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 ≥ 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.
The management of waste arising from the use or dispersal of this product must be organised in accordance with occupational safety regulations. See section 8 for possible need for PPE.
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 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. (Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine)
IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine)
IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Fatty acids, C18-unsaturated, dimers, oligomeric reaction products with tall oil fatty acids and triethylenetetramine)

SECTION 14. Transport information ... / >>

14.3. Transport hazard 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: 274, 335, 375, 601		
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: P5c-E2

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
Product
Point 3 - 40
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 ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)
None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:
None

SECTION 15. Regulatory information ... / >>

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:

Flam. Liq. 3	Flammable liquid, category 3
Acute Tox. 4	Acute toxicity, category 4
Skin Corr. 1B	Skin corrosion, category 1B
Eye Dam. 1	Serious eye damage, category 1
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
Skin Sens. 1A	Skin sensitization, category 1A
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	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.

SECTION 16. Other information ... / >>

- 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
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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)
25. Delegated Regulation (UE) 2023/1435 (XX Atp. CLP)
26. Delegated Regulation (UE) 2024/197 (XXI Atp. CLP)
27. Delegated Regulation (UE) 2024/2564 (XXII 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 / 04 / 09 / 11 / 12 / 13 / 14.