Safety Data Sheet

According to Annex II to REACH - Regulation 2015/830

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

1.1. Product identifier

Code: **409 00 00800-AN302-70**

Product name **STRONG THREADLOCKER**

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

Intended use **Anaerobic product for thread braking**

1.3. Details of the supplier of the safety data sheet

Name **Meccanocar Italia S.r.l.**

Full address **Via San Francesco, 22**

District and Country **56033 Capannoli (PI)**
Italy

Tel. +39 0587 609433

Fax +39 0587 607145

e-mail address of the competent person

responsible for the Safety Data Sheet **moreno.meini@meccanocar.it**

1.4. Emergency telephone number

For urgent inquiries refer to **National Poisons Information Service: +44 121 507 4123**

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 2015/830.
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:

Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Skin sensitization, category 1	H317	May cause an allergic skin reaction.

2.2. Label elements

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

Hazard pictograms:

Signal words: Warning

Hazard statements:

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

Precautionary statements:

P280	Wear protective gloves / eye protection / face protection.
P261	Avoid breathing dust / fume / gas / mist / vapours / spray.
P333+P313	If skin irritation or rash occurs: Get medical advice / attention.
P337+P313	If eye irritation persists: Get medical advice / attention.
P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P302+P352	IF ON SKIN: wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P363	Wash contaminated clothing before reuse.
P501	Dispose of contents / container in accordance with local regulations.

Contains: 2-HYDROXYETHYL METHACRYLATE

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	**x = Conc. %**	**Classification 1272/2008 (CLP)**
2-HYDROXYETHYL METHACRYLATE CAS 868-77-9 EC 212-782-2 INDEX - Reg. no. 01-2119490169-29-XXXX	27 ≤ x < 28,5	Eye Irrit. 2 H319, Skin Sens. 1 H317, Classification note according to Annex VI to the CLP Regulation: D
ACRYLIC ACID CAS 79-10-7 EC 201-177-9 INDEX 607-061-00-8	0,5 ≤ x < 0,6	Flam. Liq. 3 H226, Acute Tox. 4 H302, Acute Tox. 4 H332, Skin Corr. 1A H314, Eye Dam. 1 H318, Aquatic Acute 1 H400 M=1, Aquatic Chronic 2 H411, Classification note according to Annex VI to the CLP Regulation: D

Reg. no. 01-2119452449-31-XXXX

CUMENE HYDROPEROXIDE

CAS 80-15-9	0,5 ≤ x < 0,6	Org. Perox E H242, Acute Tox. 3 H331, Acute Tox. 4 H302, Acute Tox. 4 H312, STOT RE 2 H373, Skin Corr. 1B H314, Eye Dam. 1 H318, Aquatic Chronic 2 H411

EC 201-254-7

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Reg. no. 012119475796-19

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

SECTION 4. First aid measures

4.1. Description of first aid measures

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 30-60 minutes, opening the eyelids fully. Get medical advice/attention.
SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention.
INGESTION: Have the subject drink as much water as possible. Get medical advice/attention. Do not induce vomiting unless explicitly authorised by a doctor.
INHALATION: Get medical advice/attention immediately. Remove victim to fresh air, away from the accident scene. If the subject stops breathing, administer artificial respiration. Take suitable precautions for rescue workers.

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

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

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.
UNSUITABLE EXTINGUISHING EQUIPMENT
None in particular.

5.2. Special hazards arising from the substance or mixture

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

5.3. Advice for firefighters

GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.
Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

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

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Ensure that there is an adequate earthing system for the equipment and personnel. Avoid contact with eyes and skin. Do not breathe powders, vapours or mists. Do not eat, drink or smoke during use. Wash hands after use. 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 ventilated and dry place, far away from sources of ignition. Keep containers well sealed. Keep the product in clearly labelled containers. Avoid overheating. Avoid violent blows. 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:

FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
GBR	United Kingdom	EH40/2005 Workplace exposure limits (Third edition,published 2018)
ITA	Italia	DIRETTIVA (UE) 2017/164 DELLA COMMISSIONE del 31 gennaio 2017
NOR	Norge	Fastsatt av Arbeids- og sosialdepartementet 21. august 2018 med hjemmel i lov 17. juni 2005 nr. 62 om arbeidsmiljø, arbeidstid, stillingsvern mv. (arbeidsmiljøloven) § 1-3, § 1-4 og § 4-5
PRT	Portugal	Ministério da Economia e do Emprego Consolida as prescrições mínimas em matéria de protecção dos trabalhadores contra os riscos para a segurança e a saúde devido à exposição a agentes químicos no trabalho - Diário da República, 1.ª série - N.º 111 - 11 de junho de 2018
EU	OEL EU	Directive (EU) 2017/2398; Directive (EU) 2017/164; Directive 2009/161/EU; Directive 2006/15/EC; Directive

TLV-ACGIH	2004/37/EC; Directive 2000/39/EC; Directive 91/322/EEC. ACGIH 2019

2-HYDROXYETHYL METHACRYLATE

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,482	mg/l
Normal value in marine water	0,482	mg/l
Normal value for fresh water sediment	3,79	mg/kg
Normal value for marine water sediment	3,79	mg/kg
Normal value of STP microorganisms	10	mg/l
Normal value for the terrestrial compartment	0,476	mg/kg

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				0,83 mg/kg bw/d				
Inhalation				2,9 mg/m3				4,9 mg/m3
Skin				0,83 mg/kg bw/d				1,3 mg/kg bw/d

CUMENE HYDROPEROXIDE

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,003	mg/l
Normal value in marine water	0	mg/l
Normal value for fresh water sediment	0,023	mg/kg
Normal value for marine water sediment	0,002	mg/kg
Normal value of STP microorganisms	0,35	mg/l
Normal value for the terrestrial compartment	0,003	mg/kg

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
Inhalation								6 mg/m3

ACRYLIC ACID

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLEP	FRA	6	2	30	10	
WEL	GBR	29	10	59	20	STEL: 1-minute
VLEP	ITA	29	10	59	20	STEL: 1'
TLV	NOR	29	10	59	20	
VLE	PRT	29	10	59	20	STEL: 10 min
OEL	EU	29	10	59	20	STEL: 1'
TLV-ACGIH		6	2			

Predicted no-effect concentration - PNEC		
Normal value in fresh water	0,003	mg/l

Normal value in marine water	0	mg/l
Normal value for fresh water sediment	0,024	mg/kg
Normal value for marine water sediment	0,002	mg/kg
Normal value of STP microorganisms	0,9	mg/l
Normal value for the food chain (secondary poisoning)	0,03	mg/kg
Normal value for the terrestrial compartment	1	mg/kg

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
Inhalation	3,6 mg/m3	3,6 mg/m3	3,6 mg/m3	3,6 mg/m3	30 mg/m3	30 mg/m3	30 mg/m3	30 mg/m3
Skin	1 mg/kg bw/d		1 mg/kg bw/d		1 mg/kg bw/d		1 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.

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 (see standard EN 374).
The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.
The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

EYE PROTECTION
Wear airtight protective goggles (see standard EN 166).

RESPIRATORY PROTECTION
If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.
Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.
If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS

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

2-HYDROXYETHYL METHACRYLATE

Butyl rubber.
Breakthrough time: 480 min
Glove thickness: 0.3 mm
Guideline: EN 374
Additional Information: Observe the permeability and breakthrough time instructions provided by the glove supplier. Also take into consideration the specific local conditions in which the product is used, such as the danger of cuts, abrasions and contact times., The above mentioned hand protection is based on a specific knowledge of the chemical and of the expected handling of this product however, it may not be suitable for all workplaces. A qualified hazard assessment must be carried out before starting work in order to determine the suitability of the gloves for specific work environments and processes., The gloves must be discarded and replaced if there are indications of degradation or chemical innovation.

CUMENE HYDROPEROXIDE

Respiratory equipment: use a respiratory filter with gas filter DIN EN 141 Type A (brown color code): up to 0.1 vol.% Class 1; up to 0.5 vol.% class 2; up to 1% by volume class 3; above 1% and if conditions are unclear, breathing device independent of the environment.
Hand protection: wear resistant protective gloves (tested according to DIN EN 374). Avoid direct contact with the chemical / product / preparation with organizational measures. The glove material must be impermeable and resistant to the product / the substance / the preparation. Check the protective gloves before each use for their proper conditions. After using gloves, apply skin cleaners and skin cosmetics. Selection of glove material in consideration of breakthrough times, diffusion rates and degradation
Glove material: fluorocarbon rubber, PVC
The choice of the ideal depends on the material and also on the quality of the gloves. The degree of protection varies from manufacturer to manufacturer. Since the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and must therefore be checked before application.
Eye protection: basketball glasses (DIN EN 58211, number 3), face protection.

ACRYLIC ACID

Respiratory protection: Respiratory protection suitable for lower concentrations or short-term effect: Filter for gases / vapors of organic compounds (boiling point> 65 ° C, for example EN 14387 Type A)
Hand protection: Suitable materials also with prolonged direct contact (Recommended: protection index 6, corresponding to> 480 minutes of breakthrough time according to EN 374):
butyl rubber (butyl) - coating thickness 0.7 mm
The manufacturer's instructions for use must be observed due to the wide variety of types.
Eye protection: Tightly sealed goggles (splash goggles) (eg EN 166)
Body protection: Body protection should be chosen based on activity and possible exposure, e.g. apron, protective boots, chemical protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust)., protective boots (or according to EN 20346), antistatic.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	liquid
Colour	green
Odour	characteristic
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	Not available
Boiling range	Not available
Flash point	> 100 °C
Evaporation rate	Not available

Flammability (solid, gas)	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,08
Solubility	insoluble in water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	90-200000 cps
Explosive properties	not explosive
Oxidising properties	Not available

9.2. Other information

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

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

ACRYLIC ACID

Keep away from: oxidising agents.Maintaining a temperature of less than 13°C/55°F.May polymerise if exposed to: heat.

Corrosion on metals: corrodes metals in the presence of water or humidity.

10.2. Chemical stability

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

ACRYLIC ACID

The product is stable when stored and handled as prescribed / indicated.

10.3. Possibility of hazardous reactions

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

2-HYDROXYETHYL METHACRYLATE

Heat-evolving polymerization can occur in the presence of radical-forming substances (eg peroxides), reducing substances and / or heavy metal ions.

ACRYLIC ACID

Risk of explosion on contact with: oxidising agents,oxygen,peroxides.May polymerise on contact with: alkaline hydroxides,amines,ammonia,sulphuric acid.Forms explosive mixtures with: hot air.

10.4. Conditions to avoid

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

2-HYDROXYETHYL METHACRYLATE

Ultraviolet light. High temperature The product is normally supplied in a stabilized form. If the permitted storage period and / or storage temperature are exceeded, the product may polymerize with the evolution of heat.

CUMENE HYDROPEROXIDE

Temperatures above 80 ° C (decomposition of cumene hydroxide).

ACRYLIC ACID

Avoid exposure to: light,sources of heat,naked flames.Avoid contact with: oxygen.

Avoid heat. Avoid the oxygen content above the product of less than 5%. Avoid UV light and other high energy radiation. Avoid direct sunlight. Avoid prolonged storage. Avoid loss of inhibitors. Avoid excessive temperatures. Avoid freezing. Avoid humidity. Avoid all sources of ignition: heat, sparks, open flames.
Avoid temperatures below the crystallization range.

10.5. Incompatible materials

2-HYDROXYETHYL METHACRYLATE

Peroxides, amines, sulfur compounds, heavy metal ions, alkalis, reducing agents and oxidizing agents.

CUMENE HYDROPEROXIDE

Risk of explosion in contact with rust, ash, dirt, accelerators such as salts of heavy metals and tertiary amines; vigorous reaction on contact with concentrated mineral acids and alkaline solutions and reducing agents!

ACRYLIC ACID

Incompatible with: peroxides,oxidising substances,strong acids,strong bases,amines,iron salts,oleum,chlorosulphuric acid.

Substances to be avoided: radical formers, free radical initiators, peroxides, mercaptans, nitro-compounds, perborates, azides, ethers, ketones, aldehydes, amines, nitrates, nitrites, oxidizing agents, reducing agents, strong bases, alkaline reactive substances, acid anhydrides, acid chlorides, concentrated mineral acids, metal salts.

10.6. Hazardous decomposition products

CUMENE HYDROPEROXIDE

Phenol, acetone.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

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

LC50 (Inhalation) of the mixture:
> 20 mg/l
LD50 (Oral) of the mixture:
Not classified (no significant component)
LD50 (Dermal) of the mixture:
Not classified (no significant component)

CUMENE HYDROPEROXIDE

LD50 (Oral) 382 mg/kg Rat

LD50 (Dermal) 0,126 mg/kg Rabbit

2-HYDROXYETHYL METHACRYLATE

Method: Chemical Safety Assessment by the Pharmacology Division Staff, FDA, 1959 in Food, Drugs and Cosmetics
Reliability: 2
Species: Rat (Wistar)
Route of exposure: Oral
Results: LD50 = 5564 mg / kg bw
Method: Not indicated
Reliability: 2
Species: Rabbit (male)
Route of exposure: Dermal

Results: LD50> 5000 mg / kg bw

ACRYLIC ACID

Method: OECD 423
Reliability: 1
Species: Rat (Fischer 344; male)
Route of exposure: Oral
Results: LD50 = approx. 1000- <2000 mg / kg bw
Method: Equivalent or similar to OECD 403
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation (vapors)
Results: LC50> 5.1 mg / L air
Method: OECD 402
Reliability: 1
Species: Rabbit (New Zealand White; male / female)
Route of exposure: Dermal
Results: LD50> 2000 mg / kg bw

SKIN CORROSION / IRRITATION

Causes skin irritation

2-HYDROXYETHYL METHACRYLATE

Method: Assessment of the safety of chemicals in food, drugs and cosmetics (1959)
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Dermal
Results: Not classified

ACRYLIC ACID

Method: OECD 404
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Dermal
Results: Category 1 (irritant)

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

2-HYDROXYETHYL METHACRYLATE

Method: Evaluation of the safety of chemicals in food, drugs and cosmetics by the staff of the pharmacology division, FDA acc. to empty
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Category 2B (slightly irritating to eyes)

ACRYLIC ACID

Method: BASF-Test
Reliability: 2
Species: Rabbit (Vienna white)
Route of exposure: Ocular
Results: Category 1 (irreversible effects on the eye)

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Skin sensitization
2-HYDROXYETHYL METHACRYLATE

Method: Not indicated
Reliability: 2
Species: guinea pig (Pirbright: male)
Route of exposure: Dermal
Results: Not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

2-HYDROXYETHYL METHACRYLATE

Method: OECD 471 in vitro test
Reliability: 1
Species: S. typhimurium, E. Coli
Results: Negative with and without metabolic activation
Method: OECD 474-test in vivo
Reliability: 1
Species: Rat (Sprague-Dawley; male)
Route of exposure: Oral
Results: Negative

CUMENE HYDROPEROXIDE

Method: Equivalent or similar to OECD 471 in vitro test
Reliability: 2
Species: S. typhimurium
Results: Positive
Method: Standard NTP-Test protocol in vivo
Reliability: 1
Species: Mouse (B6C3F1; male / female)
Route of exposure: Dermal
Results: Negative

ACRYLIC ACID

Method: Equivalent or similar to OECD 476 in vitro test
Reliability: 1
Species: Chinese hamster
Results: Negative with and without metabolic activation
Method: Equivalent or similar to OECD 475-Test in vivo
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Oral
Results: Negative

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

2-HYDROXYETHYL METHACRYLATE

Method: Equivalent or similar to OECD 451

Reliability: 1
Species: Mouse (B6C3F1; male / female)
Route of exposure: Inhalation
Results: Negative

ACRYLIC ACID

Method: OECD 451
Reliability: 1
Species: Rat (Wistar; male / female)
Route of exposure: Oral
Results: Negative

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

CUMENE HYDROPEROXIDE

Adverse effects on sexual function and fertility
2-HYDROXYETHYL METHACRYLATE

Method: OECD combined repeat reproduction toxicity and reproductive / developmental toxicity screening test (GL 422 precursor protocol)
Reliability: 1
Species: Rat (Crj: CD (SD); male / female)
Route of exposure: Oral
Results: NOAEL (fertility)> = 1000 mg / kg bw / day

CUMENE HYDROPEROXIDE

ACRYLIC ACID

Method: OECD 416
Reliability: 1
Species: Rat (Wistar; male / female)
Route of exposure: Oral
Results: NOAEL (fertility) = 240 mg / kg bw / day

Adverse effects on development of the offspring
2-HYDROXYETHYL METHACRYLATE

Method: OECD 422
Reliability: 1
Species: Rat (Crj: CD (SD))
Route of exposure: Oral
Results: NOAEL (development)> = 1000 mg / kg bw / day

CUMENE HYDROPEROXIDE

Method: OECD 414
Reliability: 1
Species: Rat (Wistar)
Exposure route: oral
Results: NOAEL (development) = 15 mg / kg bw / day

ACRYLIC ACID

Method: OECD 414
Reliability: 1
Species: Rat (Sprague-Dawley)
Route of exposure: Inhalation (vapors)
Results: NOAEC (development) = 0.12 mg / L air

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

2-HYDROXYETHYL METHACRYLATE

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

CUMENE HYDROPEROXIDE

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

ACRYLIC ACID

Based on available data and through expert judgment, the substance is not classified in the target organ toxicity class for single exposure.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

2-HYDROXYETHYL METHACRYLATE

Method: OECD 422
Reliability: 1
Species: Rat (Crj: CD (SD); male / female)
Route of exposure: Oral
Results: NOAEL = 100 mg / kg bw / day
Method: OECD 413
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Inhalation
Results: NOAEC = 100 ppm

CUMENE HYDROPEROXIDE

Method: Not indicated
Reliability: 2
Species: Rat (Wistar; male)
Route of exposure: Oral
Results: Not classified
Bibliographic reference: Toxicity studies of certain organic peroxides and hydroperoxides, Floyd EP, Stokinger HE, (1958)
Method: Not indicated
Reliability: 1
Species: Rat (CDF; male / female)
Route of exposure: Inhalation (aerosol)
Results: NOAEC = 31 mg / m3 air

ACRYLIC ACID

Method: Equivalent or similar to OECD 452
Reliability: 1
Species: Rat (Wistar; male / female)

Route of exposure: Oral
Results: NOAEL = 40 mg / kg bw / day
Method: Equivalent or similar to OECD 413
Reliability: 2
Species: Mouse (B6C3F1; male / female)
Route of exposure: Inhalation (vapors)
Results: NOAEC = 0.015 mg / L air
Method: Not indicated
Reliability: 2
Species: Mouse (ICR; Male / female)
Route of exposure: Dermal
Results: Not determined
Bibliographic reference: Comparison of the Maximum Tolerated Dose (MTD) Dermal Response in Three Strains of Mice Following Repeated Exposure to Acrylic Acid, McLaughlin JE et al, (1995)

Target organ
CUMENE HYDROPEROXIDE

Lung

Route of exposure
CUMENE HYDROPEROXIDE

Inhalation

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

12.1. Toxicity

CUMENE HYDROPEROXIDE	
LC50 - for Fish	3,9 mg/l/96h
EC50 - for Crustacea	18,84 mg/l/48h
EC50 - for Algae / Aquatic Plants	3,1 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	1 mg/l

2-HYDROXYETHYL METHACRYLATE	
LC50 - for Fish	100 mg/l/96h
EC50 - for Crustacea	380 mg/l/48h
EC50 - for Algae / Aquatic Plants	836 mg/l/72h
EC10 for Crustacea	24,1 mg/l/28d
Chronic NOEC for Crustacea	24,1 mg/l
Chronic NOEC for Algae / Aquatic Plants	400 mg/l

12.2. Persistence and degradability

2-HYDROXYETHYL METHACRYLATE
Easily degradable in water, 84% in 28 days.
ACRYLIC ACID

Easily degradable in water, 81% in 28 days.

ACRYLIC ACID

Rapidly degradable

12.3. Bioaccumulative potential

Information not available

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

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.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

2-HYDROXYETHYL METHACRYLATE
Dispose of waste and residues in accordance with the requirements of local authorities.
Disposal methods:
Waste is dangerous. It must be disposed of in accordance with the regulations after consulting the competent local authorities and the disposal company in a suitable and authorized facility. Strictly controlled conditions during the disposal or treatment of air, waste water and waste. Do not add waste water to a biological waste water treatment plant. Bring waste water containing AOX for professional disposal. The key number for the waste must be determined according to the European waste type list (decision on the EU waste type list 2000/532 / EC) in collaboration with the disposal company / producer / authority Official.

CUMENE HYDROPEROXIDE
Dispose of in an appropriate incineration plant observing local regulations (s. EWC, European catalog of waste materials), if a new treatment is not possible (after adequate dilution and in small portions).

ACRYLIC ACID
It must be sent to an appropriate incineration plant, in compliance with local regulations.

SECTION 14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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/EC: None

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

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Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage greater than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

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
Org. Perox E	Organic peroxide, category E
Acute Tox. 3	Acute toxicity, category 3
Acute Tox. 4	Acute toxicity, category 4
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Skin Corr. 1A	Skin corrosion, category 1A
Skin Corr. 1B	Skin corrosion, category 1B
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
Skin Sens. 1	Skin sensitization, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 2	Hazardous to the aquatic environment, chronic toxicity, category 2
H226	Flammable liquid and vapour.
H242	Heating may cause a fire.
H331	Toxic if inhaled.

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

LEGEND:
- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY
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4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
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9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
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- 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.
Product`s classification is based on the calculation methods set out in Annex I of the CLP Regulation, unless otherwise indicated in sections 11 and 12.
The data for evaluation of chemical-physical properties are reported in section 9.

Changes to previous review:
The following sections were modified:
02 / 03 / 05 / 07 / 08 / 09 / 10 / 11 / 12 / 13 / 15 / 16.