

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: 411 00 20170-6339
Product name: POLYURETHANE FOAM INSULATING

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

Intended use: Polyurethane foam in aerosol, sealant and insulator for building

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:

Aerosol, category 1	H222 H229	Extremely flammable aerosol. Pressurised container: may burst if heated.
Reproductive toxicity, effects on or via lactation	H362	May cause harm to breast-fed children.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin irritation, category 2	H315	Causes skin irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.
Respiratory sensitization, category 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
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 4	H413	May cause long lasting harmful effects to aquatic life.

POLYURETHANE FOAM INSULATING**2.2. Label elements**

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

Hazard pictograms:



Signal words:

Danger

Hazard statements:

H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H362	May cause harm to breast-fed children.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H413	May cause long lasting harmful effects to aquatic life.
EUH204	Contains isocyanates. May produce an allergic reaction.

Precautionary statements:

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P251	Do not pierce or burn, even after use.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C / 122°F.
P211	Do not spray on an open flame or other ignition source.
P260	Do not breathe dust / fume / gas / mist / vapours / spray.

Contains: POLYMETHYLENE POLYPHENYL POLYISOCYANATE
C-14-17 CLORINATED PARAFFINS

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)
POLYMETHYLENE POLYPHENYL		

POLYURETHANE FOAM INSULATING

POLYISOCYANATE

CAS 9016-87-9 $40 \leq x < 42,5$ Carc. 2 H351, Acute Tox. 4 H332, STOT RE 2 H373, Eye Irrit. 2 H319, Skin Irrit. 2 H315, STOT SE 3 H335, Resp. Sens. 1 H334, Skin Sens. 1 H317

EC -

INDEX 615-005-00-9

**MULTI-COMPONENT SUBSTANCE
TRI (1-CHLORINE-2-PROPI)
PHOSPHATE**

CAS - $16,5 \leq x < 18$ Acute Tox. 4 H302

EC 911-815-4

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ISOBUTANE

CAS 75-28-5 $9 \leq x < 10,5$ Flam. Gas 1A H220, Press. Gas H280

EC 200-857-2

INDEX 601-004-00-0

Reg. no. 01-2119485395-27-XXXX

METHYL OXIDE DIMETHYLETER

CAS 115-10-6 $9 \leq x < 10,5$ Flam. Gas 1A H220, Press. Gas H280

EC 204-065-8

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Reg. no. 01-2119472128-37-XXXX

PROPANE

CAS 74-98-6 $4,5 \leq x < 5$ Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: U

EC 200-827-9

INDEX 601-003-00-5

Reg. no. 01-2119486944-21-XXXX

C-14-17 CLORINATED PARAFFINS

CAS 85535-85-9 $4,5 \leq x < 5$ Lact. H362, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=100, EUH066

EC 287-477-0

INDEX 602-095-00-X

Reg. no. 01-2119519269-33-XXXX

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

The product is an aerosol containing propellants. For the purposes of calculation of the health hazards, propellants are not considered (unless they have health hazards). The percentages indicated are inclusive of the propellants.

Percentage of propellants: 23,50 %

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 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Rinse skin with a shower immediately. Get medical advice/attention immediately. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention immediately.

INGESTION: Get medical advice/attention immediately. Do not induce vomiting. Do not administer anything not explicitly authorised by a doctor.

POLYURETHANE FOAM INSULATING**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**

If overheated, aerosol cans can deform, explode and be propelled considerable distances. Put a protective helmet on before approaching the 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.

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**

Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site. Send away individuals who are not suitably equipped. Wear protective gloves / protective clothing / eye protection / face protection.

6.2. Environmental precautions

Do not disperse in the environment.

6.3. Methods and material for containment and cleaning up

Use inert absorbent material to soak up leaked product. 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.

POLYURETHANE FOAM INSULATING

SECTION 7. Handling and storage

7.1. Precautions for safe handling

Avoid bunching of electrostatic charges. Do not spray on flames or incandescent bodies. Vapours may catch fire and an explosion may occur; vapour accumulation is therefore to be avoided by leaving windows and doors open and ensuring good cross ventilation. Do not eat, drink or smoke during use. Do not breathe spray.

7.2. Conditions for safe storage, including any incompatibilities

Store in a place where adequate ventilation is ensured, away from direct sunlight at a temperature below 50°C / 122°F, away from any combustion sources.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Regulatory References:

ESP	España	LÍMITES DE EXPOSICIÓN PROFESIONAL PARA AGENTES QUÍMICOS EN ESPAÑA 2019 (INSST)
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
	TLV-ACGIH	ACGIH 2019

METHYL OXIDE DIMETHYLETER

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations	
		mg/m3	ppm	mg/m3	ppm		
VLEP	ITA	983	400			INHAL	
Predicted no-effect concentration - PNEC							
Normal value in fresh water				1,55		mg/l	
Normal value in marine water				0,16		mg/l	
Normal value for fresh water sediment				6,581		mg/kg	
Normal value for marine water sediment				0,69		mg/kg	
Normal value for water, intermittent release				1,549		mg/l	
Normal value for the terrestrial compartment				0,45		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				471 mg/m3		NPI	1894 mg/m3

C-14-17 CLORINATED PARAFFINS

Predicted no-effect concentration - PNEC

Normal value in fresh water				0,1		mg/l
Normal value in marine water				0,02		mg/l

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Normal value for fresh water sediment	13	mg/kg
Normal value for marine water sediment	2,6	mg/kg
Normal value of STP microorganisms	80	mg/l
Normal value for the food chain (secondary poisoning)	10	mg/kg
Normal value for the terrestrial compartment	11,9	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				0,58 mg/kg bw/d				
Inhalation				2 mg/m3			6,7 mg/m3	
Skin				28,75 mg/kg bw/d			47,9 mg/kg bw/d	

PROPANE**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP		1000			
TLV	NOR	900	500			
TLV-ACGIH			1000			

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.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

None required.

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, a mask with a type AX filter

POLYURETHANE FOAM INSULATING

combined with a type P filter should be worn (see standard EN 14387).

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.

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.

MULTI-COMPONENT SUBSTANCE TRI (1-CHLORINE-2-PROPIL) PHOSPHATE

Waterproof chemical resistant gloves that conform to an approved standard must always be worn when handling chemicals products if a risk assessment indicates that this is necessary. After contamination with the product, immediately replace the gloves and dispose of them according to the relevant national and local regulations.

ISOBUTANE

Suitable glove material protective gloves, e.g. nitrile butadiene rubber gloves (NBR), leather gloves, heat insulating Selection of protective gloves to meet specific workplace requirements.

Suitability for specific workplaces must be clarified with the manufacturers of protective gloves.

The information is based on our tests, references from literature and information from glove manufacturers or derived by analogy with similar materials. Remember that the useful time per day of a chemical protection glove can be much shorter than the breakthrough time determined according to EN 374 due to the numerous influencing factors involved.

SECTION 9. Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	aerosol
Colour	various
Odour	characteristic
Odour threshold	Not available
pH	Not available
Melting point / freezing point	Not available
Initial boiling point	< 0 °C
Boiling range	Not available
Flash point	< -83 °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	0,98
Solubility	insoluble in water

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Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	> 450 °C
Decomposition temperature	Not available
Viscosity	Not available
Explosive properties	Not available
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.

10.2. Chemical stability

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

C-14-17 CLORINATED PARAFFINS

SADT >200°C/392°F.

10.3. Possibility of hazardous reactions

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

MULTI-COMPONENT SUBSTANCE TRI (1-CHLORINE-2-PROPIL) PHOSPHATE

Decomposition temperature:> 200 ° C

METHYL OXIDE DIMETHYLETER

Vapors can form an explosive mixture with air.

ISOBUTANE

Vapors can form an explosive mixture with air.

C-14-17 CLORINATED PARAFFINS

It can react with alkaline and earth alkaline metals which have a strong affinity for chlorine. It can react with iron, zinc and aluminum at high temperatures leading to decomposition.

10.4. Conditions to avoid

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Avoid overheating.

METHYL OXIDE DIMETHYLETER

Temperature:> 52 ° C

ISOBUTANE

Keep away from heat and other causes of fire.

C-14-17 CLORINATED PARAFFINS

Strong oxidizing agents, heat and hot surfaces. Medium chain chlorinated paraffins tend to soften or inflate most gums.

10.5. Incompatible materials

Strong reducing or oxidising agents, strong acids or alkalis, hot material.

METHYL OXIDE DIMETHYLETER

Oxygen, oxidizing agents, acid anhydrides, strong acids, carbon monoxide, acetic anhydride, powdered metals.

ISOBUTANE

Strong oxidizing agents, chlorine, oxygen.

10.6. Hazardous decomposition products

METHYL OXIDE DIMETHYLETER

Formaldehyde, carbon dioxide (CO₂), carbon monoxide, methanol.

ISOBUTANE

In case of fire or production of thermal decomposition, for example, carbon monoxide, carbon dioxide (CO₂).

C-14-17 CLORINATED PARAFFINS

Prolonged heating at temperatures in excess of 70 ° C or heating above 200 ° C for short periods will result in the decomposition and release of hydrogen chloride.

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:

>2000 mg/kg

LD50 (Dermal) of the mixture:

Not classified (no significant component)

C-14-17 CLORINATED PARAFFINS

LD50 (Oral) > 4000 mg/kg Rat - Wistar

LC50 (Inhalation) > 48,17 mg/l Rat

METHYL OXIDE DIMETHYLETER

LC50 (Inhalation) 164000 ppm/4h rat

METHYL OXIDE DIMETHYLETER

Method: Not indicated

Reliability: 2

Species: Rat (albino ChR-CD; male)

Route of exposure: Inhalation (gas)

Results: LC50: 164 000 ppm

PROPOSSILATED GLYCEROL

Method: OECD 401

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

POLYURETHANE FOAM INSULATING

Route of exposure: Oral
Results: LD50> 2000 mg / kg bw
Method: OECD 402
Reliability: 1
Species: Rat (Sprague-Dawley; male / female)
Route of exposure: Dermal
Results: LD50> 2000 mg / kg bw

PROPANE

Method: To study the concentrations at which the effects of the CNS occur following exposure by inhalation to propane by measuring LC50 (15 min) and EC50 (CNS) (10 min) in rats.
Reliability: 2
Species: Rat (Alderley Park (SPF); male / female)
Route of exposure: Inhalation
Results: LC50> 800 000 ppm

SKIN CORROSION / IRRITATION

Causes skin irritation

PROPOSSILATED GLYCEROL

Method: OECD 404
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Dermal
Results: Not irritating

C-14-17 CLORINATED PARAFFINS

Method: OECD 404
Reliability: 2
Species: Rabbit
Route of exposure: Dermal
Results: Slightly irritating

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

PROPOSSILATED GLYCEROL

Method: OECD 405
Reliability: 1
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Not irritating

C-14-17 CLORINATED PARAFFINS

Method: Not indicated
Reliability: 2
Species: Rabbit (New Zealand White)
Route of exposure: Ocular
Results: Slightly irritating

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin
Sensitising for the respiratory system

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PROPOSSILATED GLYCEROL

Method: OECD 406

Reliability: 1

Species: guinea pig (Dunkin-Hartley; male / female)

Route of exposure: Dermal

Results: Not sensitizing

Skin sensitization

C-14-17 CLORINATED PARAFFINS

Method: RAR (EU, 2008)

Reliability: 2

Species: guinea pig

Route of exposure: Dermal

Results: Not sensitizing

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

METHYL OXIDE DIMETHYLETER

Method: OECD 471 in vitro test

Reliability: 1

Species: *S. typhimurium*

Results: Negative

Method: Equivalent or similar to OECD 477 in vivo test

Reliability: 2

Species: *Drosophila melanogaster* (male)

Route of exposure: Inhalation (gas)

Results: Negative

PROPOSSILATED GLYCEROL

Method: OECD 471 in vitro test

Reliability: 1

Species: *S. typhimurium*

Results: Negative with and without metabolic activation

C-14-17 CLORINATED PARAFFINS

Method: Frequency of mutant colonies evaluated in a genetic mutation test (HPRT) with a C10-13 chlorinated paraffin (56% chlorination) - in vitro test

Reliability: 2

Species: Chinese hamster

Results: Negative with or without metabolic activation

Method: Equivalent or similar to OECD 475 in vivo test

Reliability: 2

Species: Rat (Fischer 344; male)

Route of exposure: Oral

Results: Negative

PROPANE

Method: OECD 471 in vitro test

Reliability: 1

Species: Histidine Salmonella

Results: Negative with or without metabolic activation

Method: OECD 474-test in vivo

Reliability: 1

Species: Rat (Sprague-Dawley CD; male / female)

Route of exposure: Inhalation (gas)

Results: Negative

POLYURETHANE FOAM INSULATINGCARCINOGENICITY

Does not meet the classification criteria for this hazard class

METHYL OXIDE DIMETHYLETER

Method: Equivalent or similar to OECD 453

Reliability: 1

Species: Rat (CD (R) (SD) BR; male / female)

Route of exposure: Inhalation (vapors)

Results: Negative

REPRODUCTIVE TOXICITY

May cause harm to breast-fed children.

METHYL OXIDE DIMETHYLETER

Method: Equivalent or similar to OECD 452

Reliability: 1

Species: Rat (CD (SD) BR; male / female)

Route of exposure: Inhalation (vapors)

Results: Negative

Adverse effects on sexual function and fertility

PROPOSSILATED GLYCEROL

Method: OECD 421-Read across

Reliability: 1

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: Negative, NOAEL (fertility) > = 1000 mg / kg bw / day

C-14-17 CLORINATED PARAFFINS

Method: Equivalent or similar to OECD 414

Reliability: 2

Species: Rabbit (Dutch)

Route of exposure: Oral

Results: NOAEL (development) 100 mg / kg bw / day

PROPANE

Method: OECD 413

Reliability: 1

Species: Rat (Sprague-Dawley CD; male / female)

Route of exposure: Inhalation

Results: NOAEC (fertility) 10 000 ppm

Adverse effects on development of the offspring

C-14-17 CLORINATED PARAFFINS

Method: Equivalent or similar to OECD Preliminary Reproduction Toxicity Screening Test

Reliability: 2

Species: Rat (Charles River COBS CD; male / female)

Route of exposure: Oral

Results: NOAEL (fertility) ca. 400 mg / kg bw / day

POLYURETHANE FOAM INSULATING**PROPANE**

Method: EPA OPPTS 870.3700

Reliability: 1

Species: Rat (VAF / Plus®, Sprague-Dawley Derived (CD®) CrI: CD® IGS BR)

Route of exposure: Inhalation (gas)

Results: NOAEC (development) 10 426 ppm

STOT - SINGLE EXPOSURE

May cause respiratory irritation

METHYL OXIDE DIMETHYLETER

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

ISOBUTANE

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

PROPOSSILATED GLYCEROL

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

C-14-17 CLORINATED PARAFFINS

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

PROPANE

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

May cause damage to organs

METHYL OXIDE DIMETHYLETER

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

PROPOSSILATED GLYCEROL

Method: OECD 407-Read across

Reliability: 1

Species: Rat (Wistar; male / female)

Route of exposure: Oral

Results: Negative, NOAEL > = 1000 mg / kg bw / day

C-14-17 CLORINATED PARAFFINS

Method: Equivalent or similar to OECD 408

Reliability: 2

Species: Rat (Fischer 344; male / female)

Route of exposure: Oral

Results: NOAEL 300 ppm

POLYURETHANE FOAM INSULATING

PROPANE

Method: OECD 422

Reliability: 1

Species: Rat (Sprague-Dawley; male / female)

Route of exposure: Inhalation (gas)

Results: NOAEC 16 000 ppm

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

This product may damage the structure and/or the functions of the aquatic ecosystems in the long and/or delayed term.

12.1. Toxicity

C-14-17 CLORINATED PARAFFINS

LC50 - for Fish	> 5000 mg/l/96h <i>Alburnus alburnus</i>
EC50 - for Crustacea	0,0077 mg/l/48h <i>Daphnia magna</i>
EC50 - for Algae / Aquatic Plants	> 3,2 mg/l/72h <i>Pseudokirchnerella subcapitata</i>

METHYL OXIDE DIMETHYLETER

LC50 - for Fish	4100 mg/l/96h
EC50 - for Crustacea	4400 mg/l/48h
EC50 - for Algae / Aquatic Plants	154,917 mg/l/72h
Chronic NOEC for Fish	4100 mg/l
Chronic NOEC for Crustacea	4400 mg/l

PROPOSSILATED GLYCEROL

LC50 - for Fish	> 1000 mg/l/96h
EC50 - for Crustacea	> 100 mg/l/48h
EC50 - for Algae / Aquatic Plants	> 100 mg/l/72h
Chronic NOEC for Algae / Aquatic Plants	> 100 mg/l

12.2. Persistence and degradability

PROPOSSILATED GLYCEROL

Intrinsically degradable in water, 99% in 28 days.

PROPANE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

C-14-17 CLORINATED PARAFFINS

Solubility in water < 0,1 mg/l

Rapidly degradable

POLYURETHANE FOAM INSULATING

METHYL OXIDE DIMETHYLETER

Solubility in water 45600 mg/l

12.3. Bioaccumulative potential

PROPANE

Partition coefficient: n-octanol/water 1,09

C-14-17 CLORINATED PARAFFINS

Partition coefficient: n-octanol/water 7,2

METHYL OXIDE DIMETHYLETER

Partition coefficient: n-octanol/water 0,07 Log Kow

12.4. Mobility in soil

C-14-17 CLORINATED PARAFFINS

Partition coefficient: soil/water 5

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.

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.

MULTI-COMPONENT SUBSTANCE TRI (1-CHLORINE-2-PROPI) PHOSPHATE

Product residues and empty uncleaned containers must be packed, sealed, labeled and disposed of or recycled in accordance with relevant national and local regulations. In case of large quantities, consult the supplier.

For disposal within the EC, use the appropriate code according to the European waste list (EWL). It is the responsibility of the polluter to assign waste to specific waste codes for sectors and industrial processes according to the European Waste List (EWL).

METHYL OXIDE DIMETHYLETER

It can be used after reconditioning. In accordance with local and national regulations. It must be incinerated in a suitable incineration plant in possession of an authorization issued by the competent authorities.

ISOBUTANE

Compliance with local regulations, e.g. incineration through flaring system.

No waste key number according to the European list of waste types can be assigned to this product, since this classification is based on the use (not yet determined) for which the product is intended for the consumer.

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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.

SECTION 14. Transport information**14.1. UN number**

ADR / RID, IMDG, 1950
IATA:

14.2. UN proper shipping name

ADR / RID: AEROSOLS
IMDG: AEROSOLS
IATA: AEROSOLS, FLAMMABLE

14.3. Transport hazard class(es)

ADR / RID: Class: 2 Label: 2.1

IMDG: Class: 2 Label: 2.1

IATA: Class: 2 Label: 2.1

**14.4. Packing group**

ADR / RID, IMDG, -
IATA:

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user

ADR / RID:	HIN - Kemler: --	Limited Quantities: 1 L	Tunnel restriction code: (D)
	Special Provision: -		
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
		Maximum quantity: 150 Kg	Packaging instructions: 203
IATA:	Cargo:	Maximum quantity: 75 Kg	Packaging instructions: 203
	Pass.:		

POLYURETHANE FOAM INSULATING

Special Instructions:

A145, A167,
A802**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: P3a-E1

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

Point 40

Contained substance

Point	56	POLYMETHYLENE POLYPHENYL POLYISOCYANATE
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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.

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SECTION 16. Other information

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

Flam. Gas 1A	Flammable gas, category 1A
Aerosol 1	Aerosol, category 1
Aerosol 3	Aerosol, category 3
Press. Gas	Pressurised gas
Press. Gas (Liq.)	Liquefied gas
Carc. 2	Carcinogenicity, category 2
Lact.	Reproductive toxicity, effects on or via lactation
Acute Tox. 4	Acute toxicity, category 4
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Irrit. 2	Eye irritation, category 2
Skin Irrit. 2	Skin irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Resp. Sens. 1	Respiratory sensitization, category 1
Skin Sens. 1	Skin sensitization, category 1
Aquatic Acute 1	Hazardous to the aquatic environment, acute toxicity, category 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic toxicity, category 1
Aquatic Chronic 4	Hazardous to the aquatic environment, chronic toxicity, category 4
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H229	Pressurised container: may burst if heated.
H280	Contains gas under pressure; may burst if heated.
H351	Suspected of causing cancer.
H362	May cause harm to breast-fed children.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH204	Contains isocyanates. May produce an allergic reaction.

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)

POLYURETHANE FOAM INSULATING

- 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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- 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:

01 / 02 / 03 / 04 / 08 / 09 / 10 / 11 / 12 / 13 / 14 / 15 / 16.