

Safety Data Sheet

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

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

1.1. Product identifier

Code: 4110014723
 Product name: IGRO FOAM FOR GUN
 UFI: V5N3-MWYK-7Q8M-WR2A

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

Intended use: Polyurethane sealant and insulating foam 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 Supplier: 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 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:

Aerosol, category 1	H222 H229	Extremely flammable aerosol. Pressurised container: may burst if heated.
Carcinogenicity, category 2	H351	Suspected of causing cancer.
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, chronic toxicity,	H413	May cause long lasting harmful effects to aquatic life.

category 4

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.
H351	Suspected of causing cancer.
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.
P101	If medical advice is needed, have product container or label at hand.

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P102	Keep out of reach of children.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P304+P340	IF INHALED: remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501	Dispose of contents / container in accordance with local regulations.
Contains:	POLYMETHYLENE POLYPHENYL POLYISOCYANATE CHLORINATED PARAFFINS, C14-17

As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

PBT substances contained:

CHLORINATED PARAFFINS, C14-17

The product does not contain substances with endocrine disrupting properties in concentration $\geq 0.1\%$.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
POLYMETHYLENE POLYPHENYL POLYISOCYANATE		
INDEX 615-005-00-9	$32,5 \leq x < 35$	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 STA Inhalation mists/powders: 1,5 mg/l
EC -		
CAS 9016-87-9		
1,1DIFLUOROETHANE		
INDEX -	$9 \leq x < 10,5$	Flam. Gas 1A H220, Press. Gas H280
EC 200-866-1		
CAS 75-37-6		
CHLORINATED PARAFFINS, C14-17		
INDEX 602-095-00-X	$8,5 \leq x < 10$	Lact. H362, Aquatic Acute 1 H400 M=100, Aquatic Chronic 1 H410 M=10, EUH066
EC 287-477-0		
CAS 85535-85-9		
REACH Reg. 01-2119519269-33-XXXX		

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METHYL OXIDE DIMETHYLETERINDEX - $9 \leq x < 10,5$ Flam. Gas 1A H220, Press. Gas H280

EC 204-065-8

CAS 115-10-6

REACH Reg. 01-2119472128-37-XXXX

ISOBUTANEINDEX 601-004-00-0 $9 \leq x < 10,5$ Flam. Gas 1A H220, Press. Gas H280

EC 200-857-2

CAS 75-28-5

REACH Reg. 01-2119485395-27-XXXX

BUTANEINDEX 601-004-00-0 $2 \leq x < 2,5$ Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: C, U

EC 203-448-7

CAS 106-97-8

REACH Reg. 01-2119474691-32-XXXX

PROPANEINDEX 601-003-00-5 $2 \leq x < 2,5$ Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: U

EC 200-827-9

CAS 74-98-6

REACH Reg. 01-2119486944-21-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: 22,00 %

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.

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.

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 2021
FRA	France	Valeurs limites d'exposition professionnelle aux agents chimiques en France. ED 984 - INRS
ITA	Italia	Decreto Legislativo 9 Aprile 2008, n.81
NOR	Norge	Forskrift om endring i forskrift om tiltaksverdier og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (forskrift om tiltaks- og grenseverdier), 21. august 2018 nr. 1255
POL	Polska	Rozporządzenie ministra rozwoju, pracy i technologii z dnia 18 lutego 2021 r. Zmieniające rozporządzenie w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy
GBR	TLV-ACGIH RCP TLV	ACGIH 2022 ACGIH TLVs and BEIs – Appendix H

ISOBUTANE

Threshold Limit Value

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
RCP TLV			1000			RESP

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

CHLORINATED PARAFFINS, C14-17

Predicted no-effect concentration - PNEC

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Normal value in fresh water	0,1	mg/l
Normal value in marine water	0,02	mg/l
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			
NDS/NDSCh	POL	1800				
TLV-ACGIH			1000			

BUTANE**Threshold Limit Value**

Type	Country	TWA/8h		STEL/15min		Remarks / Observations
		mg/m3	ppm	mg/m3	ppm	
VLA	ESP		1000			Gases
VLEP	FRA	1900	800			
TLV	NOR	600	250			
NDS/NDSCh	POL	1900		3000		
WEL	GBR	1450	600	1810	750	
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 ; 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.

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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 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.

ISOBUTANE

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

Suitability for specific workplaces should 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 protective glove can be much shorter than the breakthrough time determined according to EN 374 due to the many influencing factors involved.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Properties	Value	Information
Appearance	aerosol	
Colour	cream	
Odour	mild	
Melting point / freezing point	not available	
Initial boiling point	-12 °C	
Flammability	flammable gas	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	< -83 °C	
Auto-ignition temperature	> 460 °C	Propellant
Decomposition temperature	not available	

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pH	not available	
Kinematic viscosity	not available	
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	<300000 Pa	Temperature: 50 °C
Density and/or relative density	992 g/dm ³	
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) 15,83 % - 157,00 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.

10.2. Chemical stability

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

CHLORINATED PARAFFINS, C14-17

SADT >200°C/392°F.

10.3. Possibility of hazardous reactions

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

ISOBUTANE

Vapors can form an explosive mixture with air.

METHYL OXIDE DIMETHYLETER

Vapors can form an explosive mixture with air.

CHLORINATED PARAFFINS, C14-17

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.

BUTANE

Vapors can form an explosive mixture with air.

10.4. Conditions to avoid

Avoid overheating.

ISOBUTANE

Keep away from heat and other causes of fire.

METHYL OXIDE DIMETHYLETER

Temperature:> 52 ° C

CHLORINATED PARAFFINS, C14-17

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

BUTANE

Avoid heat and sources of ignition.

10.5. Incompatible materials

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

ISOBUTANE

Strong oxidizing agents, chlorine, oxygen.

METHYL OXIDE DIMETHYLETER

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

BUTANE

Strong oxidizing agents, chlorine, oxygen.

10.6. Hazardous decomposition products

ISOBUTANE

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

METHYL OXIDE DIMETHYLETER

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

CHLORINATED PARAFFINS, C14-17

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.

BUTANE

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

SECTION 11. Toxicological information**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

4110014723 - IGRO FOAM FOR GUNACUTE TOXICITY

ATE (Inhalation - mists / powders) of the mixture: 3,5 mg/l
ATE (Oral) of the mixture: Not classified (no significant component)
ATE (Dermal) of the mixture: Not classified (no significant component)

POLYMETHYLENE POLYPHENYL POLYISOCYANATE

STA (Inhalation mists/powders): 1,5 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)

METHYL OXIDE DIMETHYLETER

LC50 (Inhalation vapours): 164000 ppm/4h rat

CHLORINATED PARAFFINS, C14-17

LD50 (Oral): > 4000 mg/kg Rat - Wistar
LC50 (Inhalation vapours): > 48,17 mg/l/1h Rat

PROPOSSILATED GLYCEROL

Method: OECD 401

Reliability: 1

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

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

METHYL OXIDE DIMETHYLETER

Method: Not indicated

Reliability: 2

Species: Rat (albino ChR-CD; male)

Route of exposure: Inhalation (gas)

Results: LC50: 164 000 ppm

POLYPROPYLENE GLYCOL

Method: OECD 401

Reliability: 1

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

Route of exposure: Oral

Results: LD50> 5000 mg / kg bw

Method: OECD 402

Reliability: 1

Species: Rabbit (New Zealand White; male / female)

Route of exposure: Dermal

Results: LD50> 3000 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

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Species: Rat (Alderley Park (SPF); male / female)
Route of exposure: Inhalation
Results: LC50> 800 000 ppm

BUTANE

Method: Not indicated

Reliability: 2

Species: Rat (Alderley Park (SPF); male / female)

Route of exposure: Inhalation

Results: LC50: 1 443 mg / L air

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

CHLORINATED PARAFFINS, C14-17

Method: OECD 404

Reliability: 2

Species: Rabbit

Route of exposure: Dermal

Results: Slightly irritating

POLYPROPYLENE GLYCOL

Method: EPA OPPTS 870.2500

Reliability: 1

Species: Rabbit (New Zealand White)

Route of exposure: Dermal

Results: Not 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

4110014723 - IGRO FOAM FOR GUN**CHLORINATED PARAFFINS, C14-17**

Method: Not indicated

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Slightly irritating

POLYPROPYLENE GLYCOL

Method: Equivalent or similar to EU Method B.5

Reliability: 2

Species: Rabbit (New Zealand White)

Route of exposure: Ocular

Results: Not irritating

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Sensitising for the respiratory system

PROPOSSILATED GLYCEROL

Method: OECD 406

Reliability: 1

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

Route of exposure: Dermal

Results: Not sensitizing

POLYPROPYLENE GLYCOL

Method: OECD 429

Reliability: 1

Species: Mouse (CBA; female)

Route of exposure: Dermal

Results: Not sensitizing

Skin sensitization**CHLORINATED PARAFFINS, C14-17**

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

4110014723 - IGRO FOAM FOR GUN**PROPOSSILATED GLYCEROL**

Method: OECD 471 in vitro test

Reliability: 1

Species: *S. typhimurium*

Results: Negative with and without metabolic activation

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

CHLORINATED PARAFFINS, C14-17

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

POLYPROPYLENE GLYCOL

Method: OECD 471 in vitro test

Reliability: 1

Species: *S. typhimurium*

Results: Negative with and without metabolic activation

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

BUTANE

Method: OECD 471 in vitro test

Reliability: 1

Species: Salmonella strains, *S. typhimurium*

Results: Negative 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

CARCINOGENICITY

Suspected of causing cancer

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

BUTANE

Method: OECD 413

Reliability: 1

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

Route of exposure: Inhalation

Results: NOAEC 10000 ppm

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

CHLORINATED PARAFFINS, C14-17

Method: Equivalent or similar to OECD 414

Reliability: 2

Species: Rabbit (Dutch)

Route of exposure: Oral

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

POLYPROPYLENE GLYCOL

4110014723 - IGRO FOAM FOR GUN

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

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**CHLORINATED PARAFFINS, C14-17**

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

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

POLYMETHYLENE POLYPHENYL POLYISOCYANATE

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.

ISOBUTANE

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

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.

4110014723 - IGRO FOAM FOR GUN**CHLORINATED PARAFFINS, C14-17**

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

POLYPROPYLENE GLYCOL

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.

BUTANE

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

POLYMETHYLENE POLYPHENYL POLYISOCYANATE

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

ISOBUTANE

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

METHYL OXIDE DIMETHYLETER

Method: Equivalent or similar to OECD 452

Reliability: 1

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

Route of exposure: Inhalation (vapors)

Results: Positive, NOAEL = 2.5%

CHLORINATED PARAFFINS, C14-17

Method: Equivalent or similar to OECD 408

Reliability: 2

Species: Rat (Fischer 344; male / female)

Route of exposure: Oral

Results: NOAEL 300 ppm

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POLYPROPYLENE GLYCOL

Method: OECD 407-Read across

Reliability: 1

Species: Rat (Wistar; male / female)

Route of exposure: Oral

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

PROPANE

Method: OECD 422

Reliability: 1

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

Route of exposure: Inhalation (gas)

Results: NOAEC 16 000 ppm

BUTANE

Method: OECD 413

Reliability: 1

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

Route of exposure: Inhalation (gas)

Results: NOAEC = 10000 ppm

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

11.2. Information on other hazards

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

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

POLYPROPYLENE GLYCOL

LC50 - for Fish

> 100 mg/l/96h Danio rerio

EC50 - for Crustacea

105,8 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants

> 100 mg/l/72h Desmodesmus subspicatus

CHLORINATED PARAFFINS, C14-17

LC50 - for Fish

> 5000 mg/l/96h Alburnus alburnus

EC50 - for Crustacea

0,0077 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants

> 3,2 mg/l/72h Pseudokirchnerella subcapitata

Chronic NOEC for Crustacea

0,01 mg/l Daphnia magna

METHYL OXIDE DIMETHYLETER

LC50 - for Fish

4100 mg/l/96h

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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.

BUTANE

Quickly degradable in water.

BUTANE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

POLYPROPYLENE GLYCOL

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

PROPANE

Solubility in water 0,1 - 100 mg/l

Rapidly degradable

CHLORINATED PARAFFINS, C14-17

Solubility in water < 0,1 mg/l

NOT rapidly degradable

METHYL OXIDE DIMETHYLETER

Solubility in water 45600 mg/l

12.3. Bioaccumulative potential

BUTANE

Partition coefficient: n-octanol/water 1,09

POLYPROPYLENE GLYCOL

Partition coefficient: n-octanol/water 0,01

PROPANE

Partition coefficient: n-octanol/water 1,09

CHLORINATED PARAFFINS, C14-17

Partition coefficient: n-octanol/water 7,2

METHYL OXIDE DIMETHYLETER

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

12.4. Mobility in soil

POLYPROPYLENE GLYCOL

Partition coefficient: soil/water < 1,25

CHLORINATED PARAFFINS, C14-17

Partition coefficient: soil/water 5

12.5. Results of PBT and vPvB assessment

PBT substances contained:

CHLORINATED PARAFFINS, C14-17

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.

CONTAMINATED PACKAGING

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

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.

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.

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.

BUTANE

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.

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 or ID number

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ADR / RID, IMDG, IATA: 1950

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: 190, 327, 344, 625		
IMDG:	EMS: F-D, S-U	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 150 Kg	Packaging instructions: 203
	Passengers:	Maximum quantity: 75 Kg	Packaging instructions: 203
	Special provision:	A145, A167, A802	

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: P3a

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

Product

Point 40

Contained substance

Point 75

Point 56 POLYMETHYLENE POLYPHENYL
POLYISOCYANATE

Point 74 DIISOCYANATES

Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

CHLORINATED PARAFFINS, C14-17

REACH Reg.: 01-2119519269-33-XXXX

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

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

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

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

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 explode if heated.
H351	Suspected of causing cancer.
H362	May cause harm to breast-fed children.
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
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number

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- 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 as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

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 4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
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Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

Changes to previous review:

The following sections were modified:

01 / 02 / 03 / 09 / 11 / 12 / 15 / 16.