

# 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 14720-2756  
411 00 14723-2756P  
Product name: IGRO FOAM

### 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

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<br>H229 | Extremely flammable aerosol.<br>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,          | H410         | Very toxic to aquatic life with long lasting effects.                       |

category 1

## 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:

|               |                                                                            |
|---------------|----------------------------------------------------------------------------|
| <b>H222</b>   | Extremely flammable aerosol.                                               |
| <b>H229</b>   | Pressurised container: may burst if heated.                                |
| <b>H362</b>   | May cause harm to breast-fed children.                                     |
| <b>H373</b>   | May cause damage to organs through prolonged or repeated exposure.         |
| <b>H319</b>   | Causes serious eye irritation.                                             |
| <b>H315</b>   | Causes skin irritation.                                                    |
| <b>H335</b>   | May cause respiratory irritation.                                          |
| <b>H334</b>   | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| <b>H317</b>   | May cause an allergic skin reaction.                                       |
| <b>H410</b>   | Very toxic to aquatic life with long lasting effects.                      |
| <b>EUH204</b> | Contains isocyanates. May produce an allergic reaction.                    |

Precautionary statements:

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

**Contains:**                      POLYMETHYLENE POLYPHENYL POLYISOCYANATE

## 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) |
|------------------------------|-------------|--------------------------------|
| C-14-17 CLORINATED PARAFFINS |             |                                |

## IGRO FOAM

CAS 85535-85-9                       $40 \leq x < 42,5$                       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

**POLYMETHYLENE POLYPHENYL  
POLYISOCYANATE**

CAS 9016-87-9                       $28,5 \leq x < 30$                       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

**METHYL OXIDE DIMETHYLETER**

CAS 115-10-6                       $8 \leq x < 9$                       Flam. Gas 1A H220, Press. Gas H280

EC 204-065-8

INDEX -

Reg. no. 01-2119472128-37-XXXX

**ISOBUTANE**

CAS 75-28-5                       $7 \leq x < 8$                       Flam. Gas 1A H220, Press. Gas H280

EC 200-857-2

INDEX 601-004-00-0

Reg. no. 01-2119485395-27-XXXX

**BUTANE**

CAS 106-97-8                       $2 \leq x < 2,5$                       Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: C U

EC 203-448-7

INDEX 601-004-00-0

Reg. no. 01-2119474691-32-XXXX

**PROPANE**

CAS 74-98-6                       $2 \leq x < 2,5$                       Flam. Gas 1A H220, Press. Gas (Liq.) H280, Classification note according to Annex VI to the CLP Regulation: U

EC 200-827-9

INDEX 601-003-00-5

Reg. no. 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: 20,00 %

## 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 2019 (INSST)                                                                                                              |
| 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 |
|     | TLV-ACGIH      | ACGIH 2019                                                                                                                                                                                  |

### 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  |
| 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  |

### METHYL OXIDE DIMETHYLETER

#### Threshold Limit Value

| Type | Country | TWA/8h | STEL/15min | Remarks / Observations |
|------|---------|--------|------------|------------------------|
|------|---------|--------|------------|------------------------|

## IGRO FOAM

|                                              |     | 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       |

| 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 |            |     |                        |

| 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  |            |      |                        |
| WEL                   | GBR     | 1450   | 600  | 1810       | 750  |                        |
| TLV                   | NOR     | 600    | 250  |            |      |                        |
| 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 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, 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                         | cream         |
| Odour                          | mild          |
| 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)      | flammable gas |
| 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                       | Not available      |
| Solubility                             | insoluble in water |
| Partition coefficient: n-octanol/water | Not available      |
| Auto-ignition temperature              | > 460 °C           |
| Decomposition temperature              | Not available      |
| Viscosity                              | Not available      |
| Explosive properties                   | Not available      |
| Oxidising properties                   | Not available      |

#### 9.2. Other information

|                              |         |
|------------------------------|---------|
| VOC (Directive 2010/75/EC) : | 21,35 % |
| VOC (volatile carbon) :      | 0       |

## 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.

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.

METHYL OXIDE DIMETHYLETER

Vapors can form an explosive mixture with air.



**ISOBUTANE**

Vapors can form an explosive mixture with air.

**BUTANE**

Vapors can form an explosive mixture with air.

**10.4. Conditions to avoid**

Avoid overheating.

**C-14-17 CLORINATED PARAFFINS**

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

**METHYL OXIDE DIMETHYLETER**

Temperatures:> 52 ° C

**ISOBUTANE**

Keep away from heat and other causes of fire.

**BUTANE**

Avoid heat and sources of ignition.

**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.

**BUTANE**

Strong oxidizing agents, chlorine, oxygen.

**10.6. Hazardous decomposition products****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.

**METHYL OXIDE DIMETHYLETER**

Formaldehyde, carbon dioxide (CO<sub>2</sub>), carbon monoxide, methanol.

**ISOBUTANE**

In case of fire or production of thermal decomposition, for example, carbon monoxide, carbon dioxide (CO<sub>2</sub>).

**BUTANE**

In case of fire or production of thermal decomposition, for example, carbon monoxide, carbon dioxide (CO<sub>2</sub>).

**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

LC<sub>50</sub> (Inhalation) of the mixture:

> 20 mg/l

LD<sub>50</sub> (Oral) of the mixture:

Not classified (no significant component)

LD<sub>50</sub> (Dermal) of the mixture:

Not classified (no significant component)

**C-14-17 CLORINATED PARAFFINS**

LD<sub>50</sub> (Oral) > 4000 mg/kg Rat - Wistar

LC<sub>50</sub> (Inhalation) > 48,17 mg/l Rat

**METHYL OXIDE DIMETHYLETER**

LC<sub>50</sub> (Inhalation) 164000 ppm/4h rat

**METHYL OXIDE DIMETHYLETER**

**IGRO FOAM**

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  
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

**C-14-17 CLORINATED PARAFFINS**

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

**IGRO FOAM****C-14-17 CLORINATED PARAFFINS**

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

**POLYPROPYLENE GLYCOL**

Method: OECD 429

Reliability: 1

Species: Mouse (CBA; 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

**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

**METHYL OXIDE DIMETHYLETER**

Method: OECD 471 in vitro test

Reliability: 1

**IGRO FOAM**

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

**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**

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)

**IGRO FOAM**

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

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

**POLYPROPYLENE GLYCOL**

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

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

**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

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.

**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.

**POLYPROPYLENE GLYCOL**

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.

**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

**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

**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.

**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**

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

**ASPIRATION HAZARD**

Does not meet the classification criteria for this hazard class

**SECTION 12. Ecological information**

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

**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 |

**C-14-17 CLORINATED PARAFFINS**

|                                   |                                               |
|-----------------------------------|-----------------------------------------------|
| 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 |

**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        |

**12.2. Persistence and degradability****POLYPROPYLENE GLYCOL**

Easily degradable in water, 86.6% 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

## C-14-17 CLORINATED PARAFFINS

Solubility in water &lt; 0,1 mg/l

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

## 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**

## POLYPROPYLENE GLYCOL

Partition coefficient: soil/water &lt; 1,25

## 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.

#### 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.

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.

#### 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

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<br>Quantities: 1<br>L  | Tunnel<br>restriction<br>code: (D) |
|            | Special Provision: -  |                                |                                    |
| IMDG:      | EMS: F-D, S-U         | Limited<br>Quantities: 1<br>L  |                                    |
| IATA:      | Cargo:                | Maximum<br>quantity: 150<br>Kg | Packaging<br>instructions:<br>203  |
|            | Pass.:                | Maximum<br>quantity: 75<br>Kg  | Packaging<br>instructions:<br>203  |
|            | Special Instructions: | A145, A167,<br>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<br>POLYPHENYL<br>POLYISOCYANATE |
|-------|----|-----------------------------------------------|

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:

|                          |                                                                    |
|--------------------------|--------------------------------------------------------------------|
| <b>Flam. Gas 1A</b>      | Flammable gas, category 1A                                         |
| <b>Aerosol 1</b>         | Aerosol, category 1                                                |
| <b>Aerosol 3</b>         | Aerosol, category 3                                                |
| <b>Press. Gas</b>        | Pressurised gas                                                    |
| <b>Press. Gas (Liq.)</b> | Liquefied gas                                                      |
| <b>Carc. 2</b>           | Carcinogenicity, category 2                                        |
| <b>Lact.</b>             | Reproductive toxicity, effects on or via lactation                 |
| <b>Acute Tox. 4</b>      | Acute toxicity, category 4                                         |
| <b>STOT RE 2</b>         | Specific target organ toxicity - repeated exposure, category 2     |
| <b>Eye Irrit. 2</b>      | Eye irritation, category 2                                         |
| <b>Skin Irrit. 2</b>     | Skin irritation, category 2                                        |
| <b>STOT SE 3</b>         | Specific target organ toxicity - single exposure, category 3       |
| <b>Resp. Sens. 1</b>     | Respiratory sensitization, category 1                              |
| <b>Skin Sens. 1</b>      | Skin sensitization, category 1                                     |
| <b>Aquatic Acute 1</b>   | Hazardous to the aquatic environment, acute toxicity, category 1   |
| <b>Aquatic Chronic 1</b> | Hazardous to the aquatic environment, chronic toxicity, category 1 |
| <b>H220</b>              | Extremely flammable gas.                                           |
| <b>H222</b>              | Extremely flammable aerosol.                                       |
| <b>H229</b>              | Pressurised container: may burst if heated.                        |
| <b>H280</b>              | Contains gas under pressure; may burst if heated.                  |
| <b>H351</b>              | Suspected of causing cancer.                                       |
| <b>H362</b>              | May cause harm to breast-fed children.                             |

|               |                                                                            |
|---------------|----------------------------------------------------------------------------|
| <b>H332</b>   | Harmful if inhaled.                                                        |
| <b>H373</b>   | May cause damage to organs through prolonged or repeated exposure.         |
| <b>H319</b>   | Causes serious eye irritation.                                             |
| <b>H315</b>   | Causes skin irritation.                                                    |
| <b>H335</b>   | May cause respiratory irritation.                                          |
| <b>H334</b>   | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| <b>H317</b>   | May cause an allergic skin reaction.                                       |
| <b>H400</b>   | Very toxic to aquatic life.                                                |
| <b>H410</b>   | Very toxic to aquatic life with long lasting effects.                      |
| <b>EUH066</b> | Repeated exposure may cause skin dryness or cracking.                      |
| <b>EUH204</b> | 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)
- 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**

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 2015/830 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2018/1480 (XIII Atp. CLP)

**16. Regulation (EU) 2019/521 (XII Atp. CLP)**

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

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

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

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

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

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 / 04 / 08 / 09 / 10 / 11 / 12 / 13 / 15 / 16.