



**2.2. Elements of the label.**

Danger labeling according to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments.



Warnings: Danger

Indications of danger:

**H222** Extremely flammable aerosol  
**H229** Pressurized container: it can burst if heated

Prudential advices:

**P210** Keep away from heat, hot surfaces, sparks, open flames or other sources of ignition. No smoking  
**P211** Do not spray on an open flame or other source of ignition  
**P251** Do not pierce or burn, even after use  
**P410+P412** Protect from sunlight. Do not expose to temperatures above 50° C/122° F

**2.3. Other dangers**

Based on the available data, the product does not contain PBT or vPvB substances in percentages greater than 0.1%.

## SECTION 3. Composition/information on ingredients

**3.1. Substances**

Information not applicable.

**3.2. Mixtures**

Contains:

| Identification      | Conc. %.  |                            |
|---------------------|-----------|----------------------------|
| <b>INERT</b>        |           |                            |
| CAS. -              | 40 - 42,5 |                            |
| CE. -               |           |                            |
| INDEX. -            |           |                            |
| <b>PROPANE</b>      |           |                            |
| CAS. 74-98-6        | 24 - 25,5 | Flam. Gas 1 H220, Nota U   |
| CE. 200-827-9       |           |                            |
| INDEX. 601-003-00-5 |           |                            |
| <b>BUTANE</b>       |           |                            |
| CAS. 106-97-8       | 15 - 16,5 | Flam. Gas 1 H220, Nota C U |

CE. 203-448-7

INDEX. 601-004-00-0

**HYDROCARBONS, C6, ISOALCANS, <5% N- HEXANE**

CAS. - 15 - 16,5 Flam. Liq. 2 H225, Asp. Tox.  
1 H304, STOT SE 3 H336

CE. 931-254-9

INDEX. -

Nr. Reg. 01-2119484651-34-0003;01-2119484651-34

**1,2- DICHLOROPROPANE**

CAS. 78-87-5 1,5 - 2 Flam. Liq. 2 H225, Acute Tox.  
4 H302, Acute Tox. 4 H332

CE. 201-152-2

INDEX. 602-020-00-0

Note: upper value of the excluded range

The full text of the hazard statements (H) is given in section 16 of the sheet.

## SECTION 4. First aid measures

### 4.1. Description of first aid measures

EYES: Remove any contact lenses. Wash immediately and abundantly with water for at least 15 minutes, opening the eyelids well. Consult a doctor if the problem persists.

SKIN: Take off contaminated clothes. Take a shower immediately. Call a doctor immediately. Wash the contaminated garments before reusing them.

INHALATION: Bring the subject to the open air. If breathing stops, practice artificial respiration. Call a doctor immediately.

INGESTION: Call a doctor immediately. Do not induce vomiting. Do not administer anything that is not expressly authorized by the doctor.

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

For symptoms and effects due to the contained substances, see chap. 11.

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

Information not available.

## SECTION 5. Fire-fighting measures

### 5.1. Fire fighting

**SUITABLE EXTINGUISHING MEANS**

The means of extinction are the traditional ones: carbon dioxide, foam, dust and nebulized water.

**UNSUITABLE EXTINGUISHING MEDIA**

No one in particular.

## 5.2. Special hazards arising from the substance or mixture

### HAZARDS DUE TO EXPOSURE IN THE EVENT OF FIRE

In case of overheating, aerosol containers can deform, burst and can be projected at a considerable distance. Wear a protective helmet before approaching the fire. Avoid breathing combustion products.

### 5.3. Recommendations for firefighters

#### GENERAL INFORMATION

Cool the containers with jets of water to avoid the decomposition of the product and the development of substances potentially dangerous for health. Always wear full fire protection equipment.

#### EQUIPMENT

Normal fire fighting clothing, such as open circuit compressed air breathing apparatus (EN 137), flame retardant (EN469), flame retardant gloves (EN 659) and fire brigade boots (HO A29 or A30).

## SECTION 6. Measures in case of accidental release

### 6.1. Personal precautions, protective equipment and procedures in case of emergency

Eliminate any source of ignition (cigarettes, flames, sparks, etc.) or heat from the area in which the leak occurred. Remove unattended persons. Wear protective gloves/protective clothing/eye protection/face protection.

### 6.2. Environmental precautions

Preventing dispersion in the environment.

### 6.3. Methods and materials for containment and remediation

Absorb spilled product with inert absorbent material. Provide sufficient ventilation of the place affected by the leak. Disposal of contaminated material must be carried out in accordance with the provisions of section 13.

### 6.4. Reference to other sections

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

## SECTION 7. Handling and storage

### 7.1. Precautions for safe handling

Avoid the accumulation of electrostatic charges. Do not vaporize on flames or incandescent bodies. The vapors can ignite with explosion, therefore it is necessary to avoid the accumulation keeping open doors and windows and ensuring a cross ventilation. Do not eat, drink or smoke during use. Do not breathe aerosols.

### 7.2. Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place, away from direct sunlight and at temperatures below 50° C, away from any source of ignition.

### 7.3. Specific end uses

Information not available.

**SECTION 8. Exposure control/personal protection****8.1. Control parameters**

Normative References:

|     |                  |   |
|-----|------------------|---|
| CHE | Suisse / Schweiz | Valeurs limites d'exposition aux postes de travail 2012. / Grenzwerte am Arbeitsplatz |
| GRB | United Kingdom   | EH40/2005 Workplace exposure limits   |
| IRL | Éire             | Code of Practice Chemical Agent Regulations 2011                                      |
| ITA | Italia           | Decreto Legislativo 9 Aprile 2008, n.81   |
|     | TLV-ACGIH        | ACGIH 2014  |

**PROPANE****Threshold limit value**

| Type      | State | TWA/8h |      | STEL/15min |     |
|-----------|-------|--------|------|------------|-----|
|           |       | mg/m3  | ppm  | mg/m3      | ppm |
| TLV-ACGIH |       |        | 1000 |            |     |

**BUTANE****Threshold limit value**

| Type      | State | TWA/8h |      | STEL/15min |      |
|-----------|-------|--------|------|------------|------|
|           |       | mg/m3  | ppm  | mg/m3      | ppm  |
| VEL       | CHE   | 1900   | 800  |            |      |
| MAK       | CHE   | 1900   | 800  |            |      |
| WEL       | GRB   | 1450   | 600  | 1810       | 750  |
| OEL       | IRL   |        | 1000 |            | 750  |
| TLV-ACGIH |       |        |      | 2377       | 1000 |

**HYDROCARBONS, C6, ISOALCANS, <5% N-HEXANE****Threshold limit value**

| Type | State | TWA/8h |     | STEL/15min |     |
|------|-------|--------|-----|------------|-----|
|      |       | mg/m3  | ppm | mg/m3      | ppm |
| TLV  | ITA   | 1200   | 353 |            |     |

**1,2- DICHLOROPROPANE****Threshold limit value**

| Type      | State | TWA/8h |     | STEL/15min |     |
|-----------|-------|--------|-----|------------|-----|
|           |       | mg/m3  | ppm | mg/m3      | ppm |
| VEL       | CHE   | 350    | 75  |            |     |
| MAK       | CHE   | 350    | 75  |            |     |
| OEL       | IRL   | 46     | 10  |            |     |
| TLV-ACGIH |       | 46     | 10  |            |     |

Legenda:

(C) = CEILING ; INALAB = Inalable Fraction ; RESPIR = Breathable Fraction ; TORAC = Toracic Fraction

TLV of the solvent mixture: 46 mg/m3.

### 8.2. Exposure controls

Considering that the use of adequate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local aspiration.

#### HAND PROTECTION

Unnecessary.

#### SKIN PROTECTION

Wear work clothes with long sleeves and safety footwear for professional use of category I (see Directive 89/686 / EEC and EN ISO 20344). Wash with soap and water after removing protective clothing.

#### PROTECTION OF EYES

We recommend wearing tight protective goggles (see standard EN 166).

#### RESPIRATORY PROTECTION

If the threshold value (eg TLV-TWA) of the substance or one or more of the substances present in the product is exceeded, it is advisable to wear a mask with filter type AX combined with a P-type filter (see standard EN 14387).

The use of means of protection of the respiratory tract is necessary if the technical measures adopted are not sufficient to limit the exposure of the worker to the threshold values taken into consideration. However, the protection offered by the masks is limited.

#### ENVIRONMENTAL EXPOSURE CONTROLS.

Emissions from production processes, including those from ventilation equipment, should be monitored for compliance with environmental protection legislation.

## SECTION 9. Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|  |                           |
|--|---------------------------|
| Physical State                         | Aerosol                   |
| Color                                  | Beige                     |
| Smell                                  | Characteristic of solvent |
| Olfactory threshol                     | Not available             |
| pH                                     | Not available             |
| Melting or freezing point              | Not available             |
| Initial boiling point                  | Not available             |
| Boiling range                          | Not available             |
| Flash point                            | Not available             |
| Evaporation rate                       | Not available             |
| Flammability of solids and gases       | Flammable gas             |
| Lower flammability limit               | Not available             |
| Upper flammability limit               | Not available             |
| Lower explosive limit                  | Not available             |
| Upper explosive limit                  | Not available             |
| Vapor pressure                         | 8300 hPa                  |
| Vapor density                          | Not available             |
| Relative density                       | about 0,71 Kg/L           |
| Solubility                             | Slightly soluble          |
| Partition coefficient: n-octanol/water | Not available             |
| Self-ignition temperature              | Not available             |
| Decomposition temperature              | Not available             |
| Viscosity                              | Not available             |
| Explosive properties                   | Not available             |
| Oxidizing properties                   | Not available             |

### 9.2. Other information

|                              |                          |
|------------------------------|--------------------------|
| VOC (Directive 1999/13/CE) : | 42,70 % - 303,17 g/liter |
| VOC (volatile carbon) :      | 34,17 % - 242,59 g/liter |

## 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 under normal conditions of use and storage.

### 10.3. Possibility of dangerous reactions

Unusual reactions are not expected under normal use and storage conditions.

### 10.4. Conditions to avoid

Avoid overheating.

### 10.5. Incompatible materials

Strong reducing and oxidizing agents, bases and strong acids, high temperature materials.

### 10.6. Hazardous decomposition products

Information not available.

## SECTION 11. Toxicological information

No episodes of damage to health due to exposure to the product are known. In any case it is recommended to operate in compliance with the rules of good industrial hygiene. The preparation may, in particularly sensitive individuals, cause slight health effects due to inhalation and/or cutaneous absorption and/or contact with the eyes and/or ingestion.

### 11.1. Information on toxicological effects

HYDROCARBONS, C6, ISOALCANS, <5% N-HEXANE  
LD50 (Oral).> 5000 mg/kg rat  
LD50 (Cutaneous).> 3000 mg/kg rabbit  
LC50 (Inhalation).> 20 mg/L rat

## SECTION 12. Ecological information

Use according to good working practices, avoiding to disperse the product in the environment. Notify the competent authorities if the product has reached watercourses or sewers or if it has contaminated the soil or vegetation.

### 12.1. Toxicity

HYDROCARBONS, C6,  
ISOALKANES, <5% N-  
HEXANE

|                               |  |
|-------------------------------|--|
| LC50 - fish                   | > 1 mg/L/96h oryzias latipes                   |
| EC50 - shellfish              | 31,9 mg/L/48h daphnia magna                    |
| EC50 - Seaweed/aquatic plants | 13,56 mg/L/72h psuedokirchneriella subcapitata |

### 12.2. Persistence and degradability

BUTANE

Solubility in water mg/L 0,1 - 100

Quickly Biodegradable.

PROPANE

Solubility in water mg/L 0,1 - 100

Quickly Biodegradable.

1,2-DICLOROPROPANO

Solubility in water mg/L 1000 - 10000

NOT Rapidly Biodegradable.

### 12.3. Bioaccumulative potential

BUTANE

Partition coefficient: n-octanol/water 1,09

PROPANE

Partition coefficient: n-octanol/water 1,09

1,2- DICHLOROPROPANE

Partition coefficient: n-octanol/water 1,99

### 12.4. Mobility in the soil



1,2- DICHLOROPROPANE

Partition coefficient: 1,72  
soil/water**12.5. Results of the PBT and vPvB assessment**

On the basis of the available data, the product does not contain any PBT or vPvB substances in percentages greater than 0.1%.

**12.6. Other adverse effects**

Information not available.

**SECTION 13. Disposal considerations****13.1. Waste treatment methods**

Reuse, if possible. Product residues are to be considered hazardous special waste. The hazardousness of the waste that partially contains this product must be evaluated according to the laws in force.

Disposal must be entrusted to a company authorized to manage waste, in compliance with national and possibly local regulations.

The transport of waste may be subject to ADR.

CONTAMINATED PACKAGING

Contaminated packaging must be sent for recovery or disposal in accordance with national waste management regulations.

**SECTION 14. Transport information****14.1. UN number**ADR / RID, IMDG, 1950  
IATA:**14.2. UN shipping name**ADR / RID: AEROSOL  
IMDG: AEROSOLS  
IATA: AEROSOLS,  
FLAMMABLE**14.3. Danger classes related to transport**

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. Dangers for the environment**

ADR / RID: NO

**14.6. Special precautions for users**

|            |   |                          |                             |
|------------|---|--------------------------|-----------------------------|
| ADR / RID: | HIN - Kemler: --                        | Limited quantities 1 L   | Tunnel restriction code (D) |
| IMDG:      | Special disposition: -<br>EMS: F-D, S-U | Limited quantities 1 L   |                             |
| IATA:      | Cargo:                                  | Maximum quantity: 150 Kg | Packing instructions: 203   |
|            | Pass.:                                  | Maximum quantity: 75 Kg  | Packing instructions: 203   |
|            | Special instructions:                   | A145, A167, A802         |                             |

**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Information not applicable.

**SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations and legislation specific to the substance or mixture**Seveso category 8Restrictions related to the product or to the substances contained according to Annex XVII Regulation (EC) 1907/2006

None

Substances in Candidate List (Article 59 REACH)

None

Substances subject to authorization (Annex XIV REACH)

None

Substances subject to export notification obligation Reg. (CE) 649/2012

None

Substances subject to the Rotterdam Convention

None

Substances subject to the Stockholm Convention

None

Sanitary checks

Information not available.

**15.2. Evaluation of chemical safety**

No chemical safety assessment has been made for the mixture and the substances it contains.

**SECTION 16. Other information**

Testo delle indicazioni di pericolo (H) citate alle sezioni 2-3 della scheda:

|                     |  |
|---------------------|--|
| <b>Flam. Gas 1</b>  | Flammable gas, category 1                                    |
| <b>Aerosol 1</b>    | Aerosol, category 1  |
| <b>Aerosol 3</b>    | Aerosol, category 3  |
| <b>Flam. Liq. 2</b> | Flammable liquid, category 2                                 |
| <b>Acute Tox. 4</b> | Acute toxicity, category 4                                   |
| <b>Asp. Tox. 1</b>  | Danger in case of aspiration, category 1                     |
| <b>STOT SE 3</b>    | Specific target organ toxicity – single exposure, category 3 |
| <b>H220</b>         | Extremely flammable gas                                      |
| <b>H222</b>         | Extremely flammable aerosol                                  |
| <b>H229</b>         | Pressurized container: can burst if heated                   |
| <b>H225</b>         | Highly flammable liquid and vapor.                           |
| <b>H302</b>         | Harmful if swallowed   |
| <b>H332</b>         | Harmful if inhaled   |
| <b>H304</b>         | May be fatal if swallowed and enters airways                 |
| <b>H336</b>         | May cause drowsiness or dizziness                            |

## LEGEND:

- ADR: European Agreement for the transport of dangerous goods by road
- CAS NUMBER: Chemical Abstract Service number
- EC50: Concentration that gives effect to 50% of the population subjected to tests
- CE NUMBER: ID number in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived level without effect
- EmS: Emergency Schedule
- GHS: Global harmonized system for the classification and labeling of chemicals
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Concentration of immobilization of 50% of the population subjected to tests
- IMDG: International Maritime Code for the transport of dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number in Annex VI of the CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulative and toxic according to REACH
- PEC: Predictable environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predictable concentration without effects
- REACH: EC Regulation 1907/2006
- RID: Regulations for the international transport of dangerous goods by train
- TLV: Threshold limit value
- TLV CEILING: Concentration that must not be exceeded during any moment of work exposure.
- TWA STEL: Short-term exposure limit

- TWA: Weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulant according to REACH
- WGK: Aquatic hazard class (Germany)

**GENERAL BIBLIOGRAPHY:**

1. Regulation (EU) 1907/2006 of the European Parliament (REACH)
  2. Regulation (EU) 1272/2008 of the European Parliament (CLP)
  3. Regulation (EU) 790/2009 of the European Parliament (I Atp. CLP)
  4. Regulation (EU) 453/2010 of the European Parliament
  5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
  6. Regulation (EU) 618/2012 of the European Parliament (III Atp CLP)
  7. Regulation (EU) 487/2013 of the European Parliament (IV Atp CLP)
  8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
  9. Regulation (EU) 605/2014 of the European Parliament (VI 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
  - ECHA Agency Website

**Note to the user:**

The information contained in this sheet is based on the knowledge available from us at the date of the last version. The user must ensure the suitability and completeness of the information in relation to the specific use of the product.

This document should not be interpreted as a guarantee of any specific property of the product.

Since the use of the product does not fall under our direct control, it is the user's obligation to observe the laws and regulations in force concerning hygiene and safety under his own responsibility. We do not take responsibility for improper use.

Provide adequate training for personnel involved in the use of chemical products.

Changes from the previous revision.

Changes have been made to the following sections:

10.