

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: V404/GOT/ISA
 Product name: SPRAYS - REPARAGOTELÉ 400 ml ISAVAL
 UFI: V8C0-801U-3005-AS0Y

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

Intended use: Decorative aerosol product.

| Identified Uses | Industrial | Professional | Consumer |
|------------------|------------|--------------|----------|
| Consumer | - | - | ✓ |
| Industrial Use | ✓ | - | - |
| Professional Use | - | ✓ | - |

1.3. Details of the supplier of the safety data sheet

Name: AMBRO-SOL S.R.L.
 Full address: Via per Pavone del Mella n.21
 District and Country: 25020 Cigole (BS)
 Italia
 Tel. +39 030 9959674
 Fax +39 030 959265

e-mail address of the competent person responsible for the Safety Data Sheet

quality@ambro-sol.com

1.4. Emergency telephone number

For urgent inquiries refer to

Centro Antiveleni di Pavia: Tel. (+39) 0382-24444 (IRCCS Fondazione Maugeri - Pavia)
 Centro Antiveleni di Bergamo: Tel. 800 883300 (Ospedale Papa Giovanni XXIII - Bergamo)
 Centro Antiveleni di Firenze: Tel. 055 7947819 (Ospedale Careggi - Firenze)
 Centro Antiveleni di Roma: Tel. 06 3054 343 (Policlinico Gemelli - Roma)
 Centro Antiveleni di Napoli: Tel. 081 5453333 (Ospedale Cardarelli - Napoli)
 Servicio de Información Toxicológica (SIT) España: Tel. 91 5620420 (Instituto Nacional de Toxicología y Ciencias Forenses - España)
 Centro de Informação Antivenenos (CIAV): Tel. 800 250 250 (Instituto Nacional de Emergência Médica - Portugal)
 Centre Antipoison de Paris: Tel. 01 40 05 48 48 (Centre Antipoison et de Toxicovigilance de Paris - France)
 Pomorskie Centrum Toksykologii: Tel. (58) 682 04 04 (Zakład Toksykologii Klinicznej - Polska)
 American Association of Poison Control Centers (USA): Tel. +1 (800) 222 1222
 Giftnotrufzentralen (Berlin, Deutschland): Tel. +49 030 19 240

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

V404/GOT/ISA - SPRAYS - REPARAGOTELÉ 400 ml ISAVAL

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

Extremely flammable aerosol.

H229

Pressurised container: may burst if heated.

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.

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.

P102

Keep out of reach of children.

2.3. Other hazards

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

SECTION 3. Composition/information on ingredients

3.2. Mixtures

Contains:

Identification

x = Conc. %

Classification 1272/2008 (CLP)

Dimethyl ether

CAS 115-10-6

19 \leq x < 23

Flam. Gas 1A H220, Press. Gas H280

EC 204-065-8

INDEX 603-019-00-8

Reg. no. 01-2119472128-37-XXXX

Ethanol

CAS 64-17-5 $1 \leq x < 3$ Flam. Liq. 2 H225

EC 200-578-6

INDEX 603-002-00-5

Reg. no. 01-2119457610-43-XXXX

2-Butoxyethanol

CAS 111-76-2 $1 \leq x < 3$ Acute Tox. 4 H302, Acute Tox. 4 H312, Acute Tox. 4 H332, Eye Irrit. 2 H319, Skin Irrit. 2 H315

EC 203-905-0

INDEX 603-014-00-0

Reg. no. 01-2119475108-36-XXXX

Methylethylketone

CAS 78-93-3 $0 \leq x < 0,5$ Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336, EUH066

EC 201-159-0

INDEX 606-002-00-3

Reg. no. 01-2119457290-43-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: 20,80 %

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. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless 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)

Ethanol

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|---|---------|--------|------|------------|---------|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 380 | 200 | 1520 | 800 | |
| MAK | DEU | 380 | 200 | 1520 | 800 | |
| VLA | ESP | | | 1910 | 1000 | |
| VLEP | FRA | 1900 | 1000 | 9500 | 5000 | |
| NDS/NDSCh | POL | 1900 | | | | |
| WEL | GBR | 1920 | 1000 | | | |
| TLV-ACGIH | | | | 1884 | 1000 | |
| Predicted no-effect concentration - PNEC | | | | | | |
| Normal value in fresh water | | | | 960 | µg/l | |
| Normal value in marine water | | | | 790 | µg/l | |
| Normal value for fresh water sediment | | | | 3,6 | mg/kg/d | |
| Normal value for marine water sediment | | | | 2,9 | mg/kg/d | |
| Normal value for water, intermittent release | | | | 2,75 | mg/l | |
| Normal value of STP microorganisms | | | | 580 | mg/l | |
| Normal value for the food chain (secondary poisoning) | | | | 380 | mg/kg | |
| Normal value for the terrestrial compartment | | | | 630 | µg/kg/d | |

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 | | NPI | | 87 mg/kg bw/d | | | | 87 |
| Inhalation | 950 mg/m3 | NPI | NPI | 114 mg/m3 | 1900 mg/m3 | NPI | NPI | 950 mg/m3 |
| Skin | NPI | NPI | NPI | 206 mg/kg bw/d | NPI | NPI | NPI | 343 mg/kg bw/d |

2-Butoxyethanol

Threshold Limit Value

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|--|---------|--------|-----|------------|--------|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 49 | 10 | 98 (C) | 20 (C) | SKIN |
| MAK | DEU | 49 | 10 | 98 | 20 | SKIN Hinweis |
| VLA | ESP | 98 | 20 | 245 | 50 | SKIN |
| VLEP | FRA | 49 | 10 | 246 | 50 | SKIN |
| VLEP | ITA | 98 | 20 | 246 | 50 | SKIN |
| VLE | PRT | 98 | 20 | 246 | 50 | SKIN |
| NDS/NDSCh | POL | 98 | | 200 | | SKIN |
| WEL | GBR | 123 | 25 | 246 | 50 | SKIN |
| OEL | EU | 98 | 20 | 246 | 50 | SKIN |
| TLV-ACGIH | | 97 | 20 | | | |
| Predicted no-effect concentration - PNEC | | | | | | |
| Normal value in fresh water | | | | 8,8 | mg/l | |

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| | | |
|---|------|---------|
| Normal value in marine water | 880 | µg/l |
| Normal value for fresh water sediment | 34,6 | mg/kg/d |
| Normal value for water, intermittent release | 9,1 | mg/l |
| Normal value of STP microorganisms | 463 | mg/l |
| Normal value for the food chain (secondary poisoning) | 20 | mg/kg |
| Normal value for the terrestrial compartment | 2,33 | mg/kg/d |

| 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 | | 26,7 mg/kg bw/d | | 6,3 mg/kg bw/d | | | | |
| Inhalation | 147 mg/m3 | 426 mg/m3 | NPI | 59 mg/m3 | 246 mg/m3 | 1091 mg/m3 | NPI | 98 mg/m3 |
| Skin | VND | 89 mg/kg bw/d | NPI | 75 mg/kg bw/d | VND | 89 mg/kg bw/d | NPI | 125 mg/kg bw/d |

**Propan-2-ol
Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|-----------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |
| AGW | DEU | 500 | 200 | 1000 | 400 | |
| MAK | DEU | 500 | 200 | 1000 | 400 | |
| VLA | ESP | 500 | 200 | 1000 | 400 | |
| VLEP | FRA | | | 980 | 400 | |
| NDS/NDSch | POL | 900 | | 1200 | | SKIN |
| WEL | GBR | 999 | 400 | 1250 | 500 | |
| TLV-ACGIH | | 492 | 200 | 983 | 400 | |

| Predicted no-effect concentration - PNEC | | |
|---|-------|---------|
| Normal value in fresh water | 140,9 | mg/l |
| Normal value in marine water | 140,9 | mg/l |
| Normal value for fresh water sediment | 552 | mg/kg/d |
| Normal value for marine water sediment | 552 | mg/kg/d |
| Normal value for water, intermittent release | 140,9 | mg/l |
| Normal value of STP microorganisms | 2,251 | g/l |
| Normal value for the food chain (secondary poisoning) | 160 | mg/kg |
| Normal value for the terrestrial compartment | 28 | mg/kg/d |

| 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 | VND | VND | VND | 26 mg/kg bw/d | VND | VND | VND | VND |
| Inhalation | VND | VND | VND | 89 mg/m3 | VND | VND | VND | 500 mg/m3 |
| Skin | VND | VND | VND | 319 mg/kg bw/d | VND | VND | VND | 888 mg/kg |

**Methylethylketone
Threshold Limit Value**

| Type | Country | TWA/8h | | STEL/15min | | Remarks / Observations |
|------|---------|--------|-----|------------|-----|------------------------|
| | | mg/m3 | ppm | mg/m3 | ppm | |

| | | | | | | |
|-----------|-----|-----|-----|-----|-----|------|
| AGW | DEU | 600 | 200 | 600 | 200 | SKIN |
| MAK | DEU | 600 | 200 | 600 | 200 | SKIN |
| VLA | ESP | 600 | 200 | 900 | 300 | |
| VLEP | FRA | 600 | 200 | 900 | 300 | SKIN |
| VLEP | ITA | 600 | 200 | 900 | 300 | |
| VLE | PRT | 600 | 200 | 900 | 300 | |
| NDS/NDSch | POL | 450 | | 900 | | SKIN |
| WEL | GBR | 600 | 200 | 899 | 300 | SKIN |
| OEL | EU | 600 | 200 | 900 | 300 | |
| TLV-ACGIH | | 590 | 200 | 885 | 300 | |

| | | | | | | |
|---|--|--|--|--------|---------|--|
| Predicted no-effect concentration - PNEC | | | | | | |
| Normal value in fresh water | | | | 55,8 | mg/l | |
| Normal value in marine water | | | | 55,8 | mg/l | |
| Normal value for fresh water sediment | | | | 284,74 | mg/kg/d | |
| Normal value for marine water sediment | | | | 284,74 | mg/kg/d | |
| Normal value of STP microorganisms | | | | 709 | mg/l | |
| Normal value for the food chain (secondary poisoning) | | | | 1 | g/kg | |
| Normal value for the terrestrial compartment | | | | 22,5 | mg/kg/d | |

| 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 | | | | | | | | 31 mg/kg bw/d |
| Inhalation | | | | 106 mg/m3 | | | | 600 mg/m3 |
| Skin | | | | 412 mg/kg bw/d | | | | 1161 mg/kg bw/d |

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified.

TLV of solvent mixture: 582 mg/m3

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.

HAND PROTECTION
None required.

SKIN PROTECTION
Wear category I 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.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|----------------------------|
| Appearance | aerosol |
| Colour | white |
| Odour | characteristic of solvent |
| Odour threshold | Not available |
| pH | Not available |
| Melting point / freezing point | Not available |
| Initial boiling point | Not applicable |
| Boiling range | Not available |
| Flash point | < 0 °C |
| Evaporation Rate | Not available |
| Flammability of solids and gases | Not available |
| Lower inflammability limit | Not available |
| Upper inflammability limit | Not available |
| Lower explosive limit | Not available |
| Upper explosive limit | Not available |
| Vapour pressure | Not available |
| Vapour density | Not available |
| Relative density | 0,96 ÷ 1 g/ml a 20°C |
| Solubility | partially soluble in water |
| Partition coefficient: n-octanol/water | Not available |
| Auto-ignition temperature | Not available |
| Decomposition temperature | n.a. |
| Viscosity | Not available |
| Explosive properties | not applicable |
| Oxidising properties | not applicable |

9.2. Other information

| | |
|------------------------------|--------------------------|
| VOC (Directive 2010/75/EC) : | 24,80 % - 243,03 g/litre |
| VOC (volatile carbon) : | 13,07 % - 128,12 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.

2-Butoxyethanol

Decomposes under the effect of heat.

Methylethylketone

Reacts with: light metals, strong oxidants. Attacks various types of plastic materials. Decomposes under the effect of heat.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

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

Ethanol

Risk of explosion on contact with: alkaline metals, alkaline oxides, calcium hypochlorite, sulphur monofluoride, acetic anhydride, acids, concentrated hydrogen peroxide, perchlorates, perchloric acid, perchloronitrile, mercury nitrate, nitric acid, silver, silver nitrate, ammonia, silver oxide, ammonia, strong oxidising agents, nitrogen dioxide. May react dangerously with: bromoacetylene, chlorine acetylene, bromine trifluoride, chromium trioxide, chromyl chloride, fluorine, potassium tert-butoxide, lithium hydride, phosphorus trioxide, black platinum, zirconium (IV) chloride, zirconium (IV) iodide. Forms explosive mixtures with: air.

2-Butoxyethanol

May react dangerously with: aluminium, oxidising agents. Forms peroxides with: air.

Methylethylketone

May form peroxides with: air, light, strong oxidising agents. Risk of explosion on contact with: hydrogen peroxide, nitric acid, sulphuric acid. May react dangerously with: oxidising agents, trichloromethane, alkalis. Forms explosive mixtures with: air.

10.4. Conditions to avoid

Avoid overheating.

Ethanol

Avoid exposure to: sources of heat, naked flames.

2-Butoxyethanol

Avoid exposure to: sources of heat, naked flames.

Methylethylketone

Avoid exposure to: sources of heat.

10.5. Incompatible materials

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

2-Butoxyethanol

Keep away from: strong oxidants.

Methylethylketone

Incompatible with: strong oxidants, inorganic acids, ammonia, copper, chloroform.

10.6. Hazardous decomposition products

2-Butoxyethanol

May develop: hydrogen.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

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

ATE (Inhalation) of the mixture:

> 20 mg/l

ATE (Oral) of the mixture:

>2000 mg/kg

ATE (Dermal) of the mixture:

>2000 mg/kg

Dimethyl ether

LC50 (Inhalation) 164000 ppm rat

Ethanol

LD50 (Oral) > 1000 mg/kg bw Rat

LD50 (Dermal) > 10000 mg/kg bw

LC50 (Inhalation) > 100 mg/l/4h Pimephales promelas

2-Butoxyethanol

LD50 (Oral) > 1000 mg/kg bw guinea pig

LD50 (Dermal) > 400 mg/kg bw rabbit

LC50 (Inhalation) > 400 ppm/4h rat

Methylethylketone

LD50 (Oral) > 2000 mg/kg rat

LD50 (Dermal) 10 ml/kg rabbit

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Dimethyl ether

| | |
|----------------------------|--|
| LC50 - for Fish | > 4000 mg/l/96h <i>Poecilia reticulata</i> |
| EC50 - for Crustacea | > 4000 mg/l/48h <i>Daphnia magna</i> |
| Chronic NOEC for Fish | 4,1 g/l 4 days |
| Chronic NOEC for Crustacea | 4,4 g/l 48 h |

Ethanol

| | |
|-----------------------------------|---------------------|
| LC50 - for Fish | 15,4 g/l/96h 4 days |
| EC50 - for Crustacea | 10 g/l/48h |
| EC50 - for Algae / Aquatic Plants | 275 mg/l/72h |
| EC10 for Algae / Aquatic Plants | 11,5 mg/l/72h |
| Chronic NOEC for Fish | 625 mg/l 5 days |
| Chronic NOEC for Crustacea | 9,6 mg/l 9 days |

2-Butoxyethanol

| | |
|---|------------------|
| LC50 - for Fish | 1,474 g/l |
| EC50 - for Crustacea | 1,55 g/l |
| EC50 - for Algae / Aquatic Plants | 911 mg/l/72h |
| EC10 for Crustacea | 134 mg/l 21 days |
| Chronic NOEC for Fish | 100 mg/l 21 days |
| Chronic NOEC for Crustacea | 100 mg/l 21 days |
| Chronic NOEC for Algae / Aquatic Plants | 88 mg/l 72 h |

Methylethylketone

| | |
|-----------------|-------------|
| LC50 - for Fish | 2,9 g/l/96h |
|-----------------|-------------|

| | |
|-----------------------------------|--------------|
| EC50 - for Crustacea | 308 mg/l/48h |
| EC50 - for Algae / Aquatic Plants | 1,97 g/l/72h |
| Chronic NOEC for Crustacea | 68 mg/l 48 h |

12.2. Persistence and degradability

Dimethyl ether

NOT rapidly degradable

Under test conditions no biodegradation observed (100%)

Ethanol

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

2-Butoxyethanol

Solubility in water 1000 - 10000 mg/l

Rapidly degradable

Methylethylketone

Solubility in water > 10000 mg/l

Rapidly degradable

12.3. Bioaccumulative potential

Ethanol

Partition coefficient: n-octanol/water -0,35

2-Butoxyethanol

Partition coefficient: n-octanol/water 0,81

Methylethylketone

Partition coefficient: n-octanol/water 0,3

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

Dimethyl ether

Given the high rate of disappearance of the solution, the product is unlikely to constitute a significant hazard to aquatic life. Destructive effect on ozone: 0.

Global warming potential (GWP): 1.

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.

SECTION 14. Transport information

14.1. UN number

ADR / RID, IMDG, 1950
IATA:

14.2. UN proper shipping name

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

14.3. Transport hazard class(es)

ADR / RID: Class: 2 Label: 2.1
IMDG: Class: 2 Label: 2.1
IATA: Class: 2 Label: 2.1



14.4. Packing group

ADR / RID, IMDG, -
IATA:

14.5. Environmental hazards

ADR / RID: NO
IMDG: NO
IATA: NO

14.6. Special precautions for user

| | | | |
|------------|----------------------|-----------------------|------------------------------|
| ADR / RID: | HIN - Kemler: -- | Limited Quantities: 1 | Tunnel restriction code: (D) |
| | Special Provision: - | L | |
| IMDG: | EMS: F-D, S-U | Limited Quantities: 1 | |

| | | | |
|-------|-----------------------|--------------------------|-------------------------|
| IATA: | Cargo: | L | Packaging instructions: |
| | Pass.: | Maximum quantity: 150 Kg | 203 |
| | Special Instructions: | Maximum quantity: 75 Kg | Packaging instructions: |
| | | A145, A167, A802 | 203 |

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

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

Product Point
40

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage \geq 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

Information not available

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 |
| Flam. Liq. 2 | Flammable liquid, category 2 |
| Press. Gas | Pressurised gas |
| Acute Tox. 4 | Acute toxicity, category 4 |
| 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 |
| H220 | Extremely flammable gas. |
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: may burst if heated. |
| H225 | Highly flammable liquid and vapour. |
| H280 | Contains gas under pressure; may burst if heated. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H332 | Harmful if inhaled. |
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H336 | May cause drowsiness or dizziness. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

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.

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:

09.