SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name:	BI-PRIMER
Product code:	40.306
UFI code:	1FMK-936W-V00V-MNDD

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

Two-component spray primer

1.3 Details of the supplier of the safety data sheet

Company name:	Silpar TK snc
Address:	Via Rosa Luxemburg 12/14 10093 - Collegno (TO)
Telephone:	+39 011 7791177
Fax:	+39 011 7791177
Email:	sicurezza@silpartkline.com

1.4 Emergency telephone number

CAVp "Osp. Pediatrico Bambino Gesù - Roma	Tel. +39 06 68593726
Az. Osp. Univ. Foggia	Tel. +39 0881 732326
Az. Osp. "A. Cardarelli" – Napoli	Tel. +39 081 7472870
CAV Policlinico "Umberto I" – Roma	Tel. +39 06 49978000
CAV Policlinico "A. Gemelli" – Roma	Tel. +39 06 3054343
Az. Osp. "Careggi" U.O. Tossicologia Medica – Firenze	Tel. +39 055 7947819
CAV Centro Nazionale di Informazione Tossicologica – Pavia	Tel. +39 0382 24444
Osp. Niguarda Ca' Granda – Milano	Tel. +39 02 66101029
Azienda Ospedaliera Papa Giovanni XXII – Bergamo	Tel. +39 800 883300
Azienda Ospedaliera Universitaria Integrata Verona	Tel. +39 800 011858

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Reg. EU n°1272/2008 [CLP]
Aerosols 1, H222+H229
Eye Irrit. 2, H319
Eye Irrit. 2, H319
STOT SE 3, H336

2.2 Label elements

Hazard pictograms:

Signal word: Danger

Hazard statements:
H222 Extremely flammable aerosol
H229 Pressurised container: May burst if heated
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation
H336 May cause drowsiness or dizziness

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand
P102 Keep out of reach of children
P103 Read label before use
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P261 Avoid breathing dust/fume/gas/mist/ vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312 If you feel unwell, call a POISON CENTER/doctor.
P337+P313 If eye irritation persists, get medical advice/attention.
P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 ºC/122 ºF.
P501 Dispose of contents/container in accordance with local/regional/ national/international regulations

Contains:
acetone
n-butyl acetate
butan-1-ol
1-methoxy-2-propanol

2.3 Other hazards

Substance vPvB: None - Substance PBT: None.
Aerosol containers exposed to temperatures above 50°C can deform and burst and be projected a considerable distance. The vapors are heavier than air and can localize in confined spaces, spread to the ground and can form flammable and explosive mixtures with air in the event of ignition even remotely, with consequent risk of fire. The aerosol contains an asphyxiating gas; avoid the accumulation of vapors in large quantities in confined environments as it can cause asphyxiation due to lack of oxygen. Exposure to high concentrations of vapours, particularly in confined and inadequately ventilated environments, can cause irritation to the respiratory tract, nausea, malaise and dizziness.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

N.A.

3.2 Mixtures

1.CAS 2.N° EC 3.N° Index 4.N° REACH	Name	Weight (%)	Classification 1272/2008 (CLP)
1. 115-10-6 2. 204-065-8 3. Not Available 4. 01-2119472128-37-XXXX	Dimethyl ether	25-50	Flam. Gas 1 H220 Press. Gas H280
1. 67-64-1 2. 200-662-2 3. 606-001-00-8 4. 01-2119471330-49-XXXX	Acetone	10-25	Flam. Liq. 2 H225 Eye Irrit. 2 H319 STOT SE 3 H336
1. 123-86-4 2. 204-658-1 3. 607-025-00-1 4. 01-2119485493-29-XXXX	n-butyl acetate	10-25	Flam. Liq. 3 H226 STOT SE 3 H336 EUH066
1. 108-10-1 2. 203-550-1 3. 606-004-00-4 4. 01-2119473980-30-XXXX	4-methyl-pentan-2-one	2.5-5	Flam. Liq. 2 H225 Acute Tox. 4 H332 Eye Irrit. 2 H319 STOT SE 3 H335

1. 1330-20-7 2. 215-353-7 3. Not Available 4. 01-2119488216-32-XXXX	xylene, mixture of isomers	2.5-5	Flam. Liq. 3 H226 Asp. Tox. 1 H304 Dermal Acute Tox. 4 H312 Skin Irrit. 2 H315 Eye Irrit. 2 H319 Inhal Acute Tox. 4 H332 STOT SE 3 H335
1. 71-36-3 2. 200-751-6 3. Not Available 4. 01-2119484630-38-XXXX	butan-1-ol	1-2.5	Flam. Liq. 3 H226 Acute Tox. 4 H302 Skin Irrit. 2 H315 Eye Dam. 1 H318 STOT SE 3 H335 STOT SE 3 H336
1. 110-43-0 2. 203-767-1 3. Not Available 4. Not Available	heptan-2-one	1-2.5	Flam. Liq. 3, H226 Acute Tox. 4 H302 Acute Tox. 4 H332
1. 107-98-2 2. 203-539-1 3. 603-064-00-3 4. 01-2119457435-35-XXXX	1-methoxy-2-propanol	1-2.5	Flam. Liq. 3 H226 STOT SE 3 H336
1. 1314-13-2 2. 215-222-5 3. Not Available 4. 01-2119463881-32-XXXX	ossido di zinco	0.25-1	Aquatic Acute 1 H400 Aquatic Chronic 1 H410

The full text of the H phrases is given in section 16 of the safety data sheet

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact: In case of contact with the eyes, rinse them with water for an adequate amount of time and keeping the eyelids open, then immediately consult an ophthalmologist.
Protect the uninjured eye.

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

Ingestion: Do not under any circumstances induce vomiting. SEEK MEDICAL EXAMINATION IMMEDIATELY

Inhalation: Remove to open air. If unwell, contact a doctor.

4.2 Most important symptoms and effects, both acute and delayed

For symptoms and effects caused by the contained substances, see chap. 11.

4.3 Indication of any immediate medical attention and special treatment needed

In the event of an accident or discomfort, consult a doctor immediately (if possible show the instructions for use or the safety data sheet).

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT
Extinguishing substances are: carbon dioxide, foam, chemical powder.
UNSUITABLE EXTINGUISHING EQUIPMENT
Do not use jets of water.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products.

5.3 Advice for firefighters

The heat causes an increase in pressure inside the container with the risk of bursting.

In the event of a fire, the aerosols, when they explode, can be projected violently at a distance, with the risk of spreading the fire.
Use suitable respiratory equipment.
Collect the contaminated water used to extinguish the fire separately. Do not discharge it into the sewer system.
If feasible from a safety point of view, move undamaged containers from the area of immediate danger.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Block the leakage if there is no hazard.
Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2 Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3 Methods and material for containment and cleaning up

Absorb the remainder with inert absorbent material. Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4 Reference to other sections

Refer to sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Pressurized container. Do not pierce or burn, even after use. Do not use in the presence of open flames or other sources of ignition. Not smoking. Avoid the accumulation of electrostatic charges. Do not spray on flames or incandescent bodies. Do not spray on hot surfaces.
USE ONLY IN A WELL-VENTILATED PLACE.
Vapors can ignite with explosion. It is therefore necessary to avoid their accumulation by keeping doors and windows open and ensuring good cross-ventilation. The vapors are heavier than air and can accumulate on the ground and, without adequate ventilation, if triggered, can ignite even remotely with the risk of backfire. Protect from sunlight. Do not expose to temperatures above 50°C/122°F.
Avoid contact with skin and eyes, inhalation of vapors and mists.
Environmental protection measures:
Minimize the release of the mixture into the air and the surrounding environment, avoiding accidental spills and keeping the product stored away from sewer drains.
Work hygiene precautions:
Contaminated clothing must be changed before entering dining areas. While working, do not eat, drink or smoke in work areas. Wash your hands after using the product. Avoid contact with skin and eyes, inhalation of vapors and mists. Do not use empty containers before they have been cleaned. Before transferring operations, make sure that there are no residual incompatible materials in the containers. Please also refer to paragraph 8 for the recommended protective devices.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:
Store in a well-ventilated place away from direct sunlight.
Recommended storage temperature: 15°C to 30°C.
Keep sparks, heat sources and any source of combustion away from open flames.
Keep containers in a vertical and safe position avoiding the possibility of falls or impacts.
Do not store the product in corridors and stairwells. Store the product only in original and closed packaging, not puncture or open aerosol containers. Keep away from food, drink and feed.
Incompatible materials:
DO NOT store together with oxidising, self-igniting, self-heating substances, organic peroxides,

oxidizers, pyrophoric liquids and solids, explosives. See also the following paragraph 10.
Indication for locals:
Fresh and adequately ventilated. Avoid the accumulation of electrostatic charges.
Storage Classes:
Refer to section 15.1 for Storage Classes/Limits (Seveso III).

7.3 Specific end use(s)
See section 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
115-10-6 dimethyl ether
VL Long-term value: 1920 mg/m^3, 1000 ppm
67-64-1 acetone
TWA Short-term value: 1781 mg/m^3, (750) ppm
Long-term value: 1187 mg/m^3, (500) ppm
A4, IBE
VL Long-term value: 1210 mg/m^3, 500 ppm
123-86-4 n-butyl acetate
TWA Short-term value: 950 mg/m^3, 200 ppm
Long-term value: 713 mg/m^3, 150 ppm
108-10-1 4-methyl-pentan-2-one
TWA Short-term value: 307 mg/m^3, 75 ppm
Long-term value: 82 mg/m^3, 20 ppm
A3, IBE
VL Short-term value: 208 mg/m^3, 50 ppm
Long-term value: 83 mg/m^3, 20 ppm
1330-20-7 xylene, mixture of isomers
TWA Short-term value: 651 mg/m^3, 150 ppm
Long-term value: 434 mg/m^3, 100 ppm
A4, IBE
VL Short-term value: 442 mg/m^3, 100 ppm
Long-term value: 221 mg/m^3, 50 ppm
Skin
71-36-3 butan-1-ol
TWA Long-term value: 61 mg/m^3, 20 ppm
110-43-0 heptane-2-one
TWA Long-term value: 233 mg/m^3, 50 ppm
VL Short-term value: 475 mg/m^3, 100 ppm
Long-term value: 238 mg/m^3, 50 ppm
Skin
107-98-2 1-methoxy-2-propanol
TWA Short-term value: 553 mg/m^3, 150 ppm
Long-term value: 369 mg/m^3, 100 ppm
1330-20-7 xylene, mixture of isomers
TWA Short-term value: 651 mg/m^3, 150 ppm
Long-term value: 434 mg/m^3, 100 ppm
A4, IBE
VL Short-term value: 442 mg/m^3, 100 ppm
Long-term value: 221 mg/m^3, 50 ppm
Skin
Components with biological limit values:
67-64-1 acetone
IBE 50 mg/l
Samples: urine

Pickup time: at the end of the shift
Biological indicator: acetone
108-10-1 4-methyl-pentan-2-one
IBE 1 mg/l
Samples: urine
Pickup time: at the end of the shift
Biological indicator: methyl isobutyl ketone (MIBK)
1330-20-7 xylene, mixture of isomers
IBE 1.5 g/g creatinine
Samples: urine
Pickup time: at the end of the shift
Biological indicator: methyllippuric acid
1330-20-7 xylene, mixture of isomers
IBE 1.5 g/g creatinine
Samples: urine
Pickup time: at the end of the shift
Biological indicator: methyllippuric acid

Derived No Effect Level (DNEL)
Dimethyl ether
Inhalation 1 894 mg/m^3 (Systemic, chronic)
Inhalation 471 mg/m^3 (Systemic, chronic)*
Acetone
Cutaneous 186 mg/kg bw/day (Systemic, chronic)
Inhalation 1 210 mg/m^3 (Systemic, chronic)
Inhalation 2 420 mg/m^3 (Local, acute)
Cutaneous 62 mg/kg bw/day (Systemic, chronic)*
Inhalation 200 mg/m^3 (Systemic, chronic)*
Oral 62 mg/kg bw/day (Systemic, chronic)*
n-butyl acetate
Cutaneous 7 mg/kg bw/day (Systemic, chronic)
Inhalation 48 mg/m^3 (Systemic, chronic)
Inhalation 300 mg/m^3 (Local, chronic)
Cutaneous 11 mg/kg bw/day (Systemic, acute)
Inhalation 600 mg/m^3 (Systemic, acute)
Inhalation 600 mg/m^3 (Local, acute)
Cutaneous 3.4 mg/kg bw/day (Systemic, chronic)*
Inhalation 12 mg/m^3 (Systemic, chronic)*
Oral 2 mg/kg bw/day (Systemic, chronic)*
Inhalation 35.7 mg/m^3 (Local, chronic)*
Cutaneous 6 mg/kg bw/day (Systemic, acute)*
Inhalation 300 mg/m^3 (Systemic, acute)*
Oral 2 mg/kg bw/day (Systemic, acute)*
Inhalation 300 mg/m^3 (Local, acute)*
4-methyl-pentan-2-one
Cutaneous 11.8 mg/kg bw/day (Systemic, chronic)
Inhalation 83 mg/m^3 (Systemic, chronic)
Inhalation 83 mg/m^3 (Local, chronic)
Inhalation 208 mg/m^3 (Systemic, acute)
Inhalation 208 mg/m^3 (Local, acute)
Cutaneous 4.2 mg/kg bw/day (Systemic, chronic)*
Inhalation 14.7 mg/m^3 (Systemic, chronic)*
Oral 4.2 mg/kg bw/day (Systemic, chronic)*
Inhalation 14.7 mg/m^3 (Local, chronic)*
Inhalation 155.2 mg/m^3 (Systemic, acute)*
Inhalation 155.2 mg/m^3 (Local, acute)*

xylene, mixture of isomers
Cutaneous 212 mg/kg bw/day (Systemic, chronic)
Inhalation 221 mg/m³ (Systemic, chronic)
Inhalation 221 mg/m³ (Local, chronic)
Inhalation 442 mg/m³ (Systemic, acute)
Inhalation 442 mg/m³ (Local, acute)
Cutaneous 125 mg/kg bw/day (Systemic, chronic)*
Inhalation 65.3 mg/m³ (Systemic, chronic)*
Oral 12.5 mg/kg bw/day (Systemic, chronic)*
Inhalation 65.3 mg/m³ (Local, chronic)*
Inhalation 260 mg/m³ (Systemic, acute)*
Inhalation 260 mg/m³ (Local, acute)*
butan-1-ol
Inhalation 310 mg/m³ (Local, chronic)
Cutaneous 3.125 mg/kg bw/day (Systemic, chronic)*
Inhalation 55,357 mg/m³ (Systemic, chronic)*
Oral 1,562 mg/kg bw/day (Systemic, chronic)*
Inhalation 155 mg/m³ (Local, chronic)*
1-methoxy-2-propanol
Cutaneous 183 mg/kg bw/day (Systemic, chronic)
Inhalation 369 mg/m³ (Systemic, chronic)
Inhalation 553.5 mg/m³ (Systemic, acute)
Inhalation 553.5 mg/m³ (Local, acute)
Cutaneous 78 mg/kg bw/day (Systemic, chronic)*
Inhalation 43.9 mg/m³ (Systemic, chronic)*
Oral 33 mg/kg bw/day (Systemic, chronic)*

* Values for the general population

PNEC exposure limit values
Dimethyl ether
0.155 mg/L (Fresh water)
0.016 mg/L (Water - intermittent release)
1,549 mg/L (Sea water)
0.681 mg/kg sediment dw (Sediment (Freshwater))
0.069 mg/kg sediment dw (Sediments (Marine))
0.045 mg/kg soil dw (Soil)
160 mg/L (STP)
Acetone
10.6 mg/L (Fresh water)
1.06 mg/L (Water - intermittent release)
21 mg/L (Sea water)
30.4 mg/kg sediment dw (Sediments (Fresh water)
3.04 mg/kg sediment dw (Sediments (Marine))
29.5 mg/kg soil dw (Soil)
100 mg/L (STP)
n-butyl acetate
0.18 mg/L (Fresh water)
0.018 mg/L (Water - intermittent release)
0.36 mg/L (Sea water)
0.981 mg/kg sediment dw (Sediment (Freshwater))
0.098 mg/kg sediment dw (Sediments (Marine))
0.09 mg/kg soil dw (Soil)
35.6 mg/L (STP)
4-methyl-pentan-2-one
0.6 mg/L (Fresh water)

0.06 mg/L (Water - intermittent release)
1.5 mg/L (Sea water)
8.27 mg/kg sediment dw (Sediment (Freshwater))
0.83 mg/kg sediment dw (Sediments (Marine))
1.3 mg/kg soil dw (Soil)
27.5 mg/L (STP)
xylene, mixture of isomers
0.327 mg/L (Fresh water)
0.327 mg/L (Water - intermittent release)
0.327 mg/L (Sea water)
12.46 mg/kg sediment dw (Sediment (Freshwater))
12.46 mg/kg sediment dw (Sediments (Marine))
2.31 mg/kg soil dw (Soil)
6.58 mg/L (STP)
butan-1-ol
0.082 mg/L (Fresh water)
0.008 mg/L (Water - intermittent release)
2.25 mg/L (Sea water)
0.324 mg/kg sediment dw (Sediment (Freshwater))
0.032 mg/kg sediment dw (Sediments (Marine))
0.017 mg/kg soil dw (Soil)
2476 mg/L (STP)
1-methoxy-2-propanol
10 mg/L (Fresh water)
1 mg/L (Water - intermittent release)
100 mg/L (Sea water)
52.3 mg/kg sediment dw (Sediment (Freshwater))
5.2 mg/kg sediment dw (Sediments (Marine))
4.59 mg/kg soil dw (Soil)
100 mg/L (STP)

Technical controls
Ensure adequate ventilation, especially in confined areas.
Make sure eye washers and showers are close to the workplace.
Use anti-exposure equipment
Provide an emergency exit.

8.2 Exposure controls

Hands protection	Protect hands with category work gloves (ref. Standard EN 374). For the final choice of the material of the work gloves it is necessary to consider: compatibility, degradation, breakage time and permeation. In the case of preparations, the resistance of work gloves to chemical agents must be checked before use as it is not foreseeable. Gloves have a wear time that depends on the duration and method of use.
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. In the event that the substance in question is odorless or its olfactory threshold is higher than the relative exposure limit and in case of emergency, or when the exposure levels are unknown or the concentration of oxygen in the work environment is less than 17% by volume, wear an open-circuit compressed air self-contained breathing apparatus (ref. standard EN 137) or respirator with external air intake for use with a full face mask, half mask or mouthpiece (ref. standard EN 138). Provide an eye wash and emergency shower system.

	The product must be used in highly ventilated environments and in the presence of strong localized aspirations, otherwise use the personal protective equipment indicated
Eye and face protection	Wear protective goggles (see standard EN 166).
Body and skin protection:	Wear professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344).

Thermal risks:
Aerosol containers, if overheated, deform, burst and can be projected a considerable distance.

Environmental exposure controls:
Emissions from production processes and deriving from the use of the product, including those from ventilation equipment, should be controlled for the purposes of compliance with environmental protection legislation.
Product residues must not be discharged uncontrolled into waste water or waterways. For further information please refer to section 6.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	Liquid under pressure
Colour:	Transparent
Odour:	Characteristic of solvent
Odour threshold:	N.A.
pH:	N.A.
Melting point/freezing point:	-24.9 °C
Initial boiling point and boiling range:	N.A.
Flash point:	< 17 °C
Evaporation rate:	N.A.
Flammability (solid, gas):	N.A.
Upper/lower flammability or explosive limits:	18.6 Vol % - 1.2 Vol %
Vapour pressure:	3400 hPa
Vapour density (Air=1):	N.A.
Relative density (Water=1):	1,049 g/cm^3
Solubility(ies):	Insoluble in water
Partition coefficient: n-octanol/water:	N.A.
Auto-ignition temperature (°C):	> 235 °C
Decomposition temperature:	N.A.
Kinematic viscosity:	N.A.
Explosive properties:	N.A.
Oxidising properties:	N.A.

9.2 Other information
Tenore del solvente:
Solventi organici: 80,6 %
Con gas propellente.
VOC(EU) 80,52 %
VOC: <840g/l

9.2.1. Information with regard to physical hazard classes
Flammable aerosol

9.2.2. Other safety characteristics
Information not available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Stable under normal conditions.

10.2 Chemical stability

Pressurized container. Do not pierce or burn, even after use. Protect from sunlight. Do not expose to temperatures above 50°C/122°F. Refer to the directions in section 7 for handling and storage.

10.3 Possibility of hazardous reactions

Under normal conditions of use and storage, dangerous reactions are not foreseeable. If released, vapors can form explosive mixtures with air. If overheated, aerosol containers can deform, burst and be projected a considerable distance.

10.4 Conditions to avoid

Avoid overheating.

10.5 Incompatible materials

Avoid contact with oxidizing materials. The product could catch fire. Avoid contact with strong reductants and oxidants, strong acids and bases, high temperature materials.

10.6 Hazardous decomposition products

It does not decompose when used for its intended uses.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Unless otherwise specified, the data required by Regulation (EU) 878/2020 indicated below are to be understood N.A.:
BI-PRIMER
ATE (Acute Toxicity Estimate (ATS))
Oral LD50 31117 mg/kg (rat)
By inhalation LC50/4 h 133-180 mg/l
a) acute toxicity
Not classified
Based on available data, the classification criteria are not met.
Dimethyl ether
Inhalation (Rat) LC50; >20000 ppm/4h
Acetone
Dermal (rabbit) LD50: 20000 mg/kg
Inhalation (Rat) LC50; 44 mg/L4h
Oral (Rat) LD50; 5800 mg/kg
n-butyl acetate
Dermal (Rabbit) LD50: 3200 mg/kg
Inhalation (Rat) LC50; 0.74 mg/l4h
Oral (Rabbit) LD50; 3200 mg/kg
4-methyl-pentan-2-one
Dermal (Rabbit) LD50: >16000 mg/kg
Inhalation (Rat) LC50; ~8.2-16.4 mg/l4h
Oral (Rat) LD50; 2080 mg/kg
Xylene, mixture of isomers
Dermal (Rabbit) LD50: >1700 mg/kg
Inhalation (Rat) LC50; 5000 ppm4h
Oral (Rat) LD50; 2119 mg/kg
butan-1-ol
Dermal (rabbit) LD50: 3400 mg/kg
Inhalation (Rat) LC50; 8000 ppm4h
Oral (Rat) LD50; 790 mg/kg
1-methoxy-2-propanol
Inhalation (Rat) LC50; >6 mg/l4h
Oral (Rat) LD50; 3739 mg/kg
b) skin corrosion/irritation

c) serious eye damage/serious eye irritation
The product is classified: Eye Irrit. 2 H319
d) respiratory or skin sensitization
The product is classified Skin Sens. 1 H317
e) mutagenicity of germ cells
Not classified
Based on available data, the classification criteria are not met.
f) carcinogenicity
Not classified
Based on available data, the classification criteria are not met.
g) reproductive toxicity
Not classified
Based on available data, the classification criteria are not met.
h) specific target organ toxicity (STOT) – single exposure
The product is classified: STOT SE 3 H336
(i) specific target organ toxicity (STOT) – repeated exposure
Not classified
Based on available data, the classification criteria are not met.
j) danger in case of aspiration
Not classified
Based on available data, the classification criteria are not met.
Toxicological information regarding the main substances present in the product:

11.2 Information on other hazards
Flammable product

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Endpoint	Duration test (hours)	Species	Value
Dimethyl ether			
LC50	96h	Fish	1783.04mg/l
EC50	48h	Crustaceans	>4400mg/L
NOEC(ECx)	48h	Crustaceans	>4000mg/l
EC50	96h	Algae	154.917mg/l
Acetone			
NOEC(ECx)	12h	Fish	0.001mg/L
LC50	96h	Fish	3744.6-5000.7mg/l
EC50	72h	Algae	5600-10000mg/l
EC50	96h	Algae	9.873-27.684mg/l
EC50	48h	Crustaceans	6098.4mg/L
N-butyl acetate			
LC50	96h	Fish	17-19mg/l
EC50	72h	Algae	246mg/l
EC50	48h	Crustaceans	32mg/l
EC50(ECx)	96h	Fish	18mg/l
4-methyl-pentan-2-one			
LC50	96h	Fish	>179mg/l
EC50	48h	Crustaceans	170mg/l
EC50(ECx)	48h	Crustaceans	170mg/l
EC50	96h	Algae	400mg/l
xylene, mixture of isomers			
LC50	96h	Fish	2.6mg/l
EC50	72h	Algae	4.6mg/l
EC50	48h	Crustaceans	1.8mg/l
NOEC(ECx)	73h	Algae	0.44mg/l
butan-1-ol			

NOEC(ECx)	504h	Crustaceans	4.1mg/l
EC50	96h	Algae	225mg/l
EC50	72h	Algae	>500mg/l
LC50	96h	Fish	100-500mg/l
EC50	48h	Crustaceans	>500mg/l
1-methoxy-2-propanol			
LC50	96h	Fish	>2000mg/l
EC50	72h	Algae	>500mg/l
EC50	48h	Crustaceans	23300mg/l
EC50(ECx)	168h	Algae	>1000mg/l
EC50	96h	Algae	>1000mg/l

12.2 Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Dimethyl ether	LOW	LOW
Acetone	LOW (Half-life = 14 giorni)	MEDIUM (Half-life = 116.25 giorni)
N-butyl acetate	LOW	LOW
4-methyl-pentan-2-one	HIGH (Half-life = 7001 giorni)	LOW (Half-life = 1.9 giorni)
Xylene, mixture of isomers	HIGH (Half-life = 360 giorni)	LOW (Half-life = 1.83 giorni)
butan-1-ol	LOW (Half-life = 54 giorni)	LOW (Half-life = 3.65 giorni)
1-methoxy-2-propanol	LOW (Half-life = 56 giorni)	LOW (Half-life = 1.7 giorni)

12.3 Bioaccumulative potential

Dimethyl ether
LOW (LogKOW = 0.1)
Acetone
LOW (BCF = 0.69)
N-butyl acetate
LOW (BCF = 14)
4-methyl-pentan-2-one
LOW (LogKOW = 1.31)
Xylene, mixture of isomers
MEDIUM (BCF = 740)
butan-1-ol
LOW (BCF = 0.64)
1-methoxy-2-propanol
LOW (BCF = 2)

12.4 Mobility in soil

Dimethyl ether
HIGH (KOC = 1.292)
Acetone
HIGH (KOC = 1.981)
N-butyl acetate
LOW (KOC = 20.86)
4-methyl-pentan-2-one
LOW (KOC = 10.91)
butan-1-ol
MEDIUM (KOC = 2.443)
1-methoxy-2-propanol
HIGH (KOC = 1)

12.5 Results of PBT and vPvB assessment

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

12.6 Endocrine disrupting properties

No data available

12.7 Other adverse effects

No data 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. Avoid littering. Do not contaminate soil, sewers and waterways. 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.

Additional disposal information:

CER CODE = 160504

SECTION 14: TRANSPORT INFORMATION

14.1 UN number or ID number

ADR-UN number: 1950
IATA-Un number: 1950
IMDG-Un number: 1950

14.2 UN proper shipping name

ADR-Shipping Name: Aerosol
IATA-Technical name: Aerosol
IMDG-Technical name: Aerosol

14.3 Transport hazard class(es)

ADR-Class: 2 5F
ADR-Label: 2
ADR - Hazard identification number: -
IATA-Class: 2.1
IATA-Label: 2.1
IMDG-Class: 2

14.4 Packing group

ADR-Packing Group: -
IATA-Packing group: -
IMDG-Packing group: -

14.5 Environmental hazards

Marine pollutant: No

14.6 Special precautions for user

IATA-Passenger Aircraft: ---
IATA-Cargo Aircraft: 203
IMDG-Technical name: Aerosol
IMDG-Page: F-D, S-U

14.7 Maritime transport in bulk according to IMO instruments

N.A.

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.
Restrictions related to the product:
Restriction 3
Restriction 40
Restrictions relating to the substances contained:
Restriction 28
Restriction 70
Restriction 72
Restriction 75

Substances subject to authorisarion (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.

Annex II - PRECURSORS OF EXPLOSIVES SUBJECT TO REPORTING
67-64-1 acetone

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 carried out for the mixture

SECTION 16: OTHER INFORMATION

Full text of H codes mentioned in sections 2 - 3

H220 Highly flammable gas.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H304 May be fatal if swallowed and enters airways.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic organisms.

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.

Classification and procedure used to derive it according to regulation (EC) 1272/2008 [CLP] in relation to mixture:

Aerosols 1, H222, H229 - Based on experimental evidence
Skin Sens. 1 H317 - Calculation method
Eye Irrit. 2, H319 - Calculation method
STOT SE 3, H336 - Calculation method

GENERAL BIBLIOGRAPHY

Regulation (EU) 1907/2006 of the European Parliament (REACH)
Regulation (EU) 1272/2008 of the European Parliament (CLP)
Regulation (EU) 2020/878 (Annex II REACH Regulation)
Regulation (EC) 790/2009 of the European Parliament (I Atp. CLP)
Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
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The Merck Index. - 10th Edition
Handling Chemical Safety
INRS - Fiche Toxicologique (toxicological sheet)
Patty - Industrial Hygiene and Toxicology
N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
ECHA website

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