

# SAFETY DATA SHEET according to regulation 1907/2006



**Product name: 7014 Adhesion promoter**

**Creation date: 18.11.2020, Revision: 15.02.2021, version: 1.1**

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

### 1.1 Product identifier

#### 1.1.1 Product name

7014 Adhesion promoter



<https://my.chemius.net/p/X5IMDY/en/pd/en>

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

#### 1.2.1 Relevant identified uses

Plastik Primer

#### 1.2.2 Uses advised against

No information.

### 1.3 Details of the supplier of the safety data sheet

#### 1.3.1 Supplier

SILCO, D.O.O.

Šentrupert 5 a

3303 Gomilsko, Slovenia

+386 3 703 3180

n.cvilak@silco-automotive.com

#### 1.3.2 Manufacturer

SILCO, D.O.O.

Šentrupert 5 a

3303 Gomilsko, Slovenia

+386 3 703 3180

n.cvilak@silco-automotive.com

### 1.4 Emergency Telephone Number

#### Emergency

112

#### Supplier

+386 3 703 3180

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

#### 2.1.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

Aerosol 1; H222 Extremely flammable aerosol.

Aerosol 1; H229.1 Pressurised container: May burst if heated.

Skin Irrit. 2; H315 Causes skin irritation.

Eye Dam. 1; H318 Causes serious eye damage.

Acute Tox. 4; H332 Harmful if inhaled.

STOT SE 3; H336 May cause drowsiness or dizziness.

## 2.2 Label elements

### 2.2.1 Labelling according to Regulation (EC) No 1272/2008 [CLP]



#### Signal word: Danger

H222 Extremely flammable aerosol.

H229.1 Pressurised container: May burst if heated.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.

EUH208 Contains 4-tert-Butylphenyl glycidyl ether. May produce an allergic reaction.

P102 Keep out of reach of children.

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.

P302 + P352 + P362 + P364 IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/doctor if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

### 2.2.2 Contains:

xylene

acetone

butan-1-ol

## 2.3 Other hazards

Vapors can form an explosive mixture with air.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

For mixtures see 3.2.

### 3.2 Mixtures

NAME	CAS EC INDEX REACH	%	CLASSIFICATION ACCORDING TO REGULATION (EC) NO 1272/2008 (CLP)	SPECIFIC CONC. LIMITS	NOTES FOR SUBSTANCES
dimethyl ether	115-10-6 204-065-8 603-019-00-8 01- 2119472128- 37	25- 50	Flam. Gas 1; H220 Press. Gas; H280	/	U

xylene	1330-20-7 215-535-7 601-022-00-9	25-50	Flam. Liq. 3; H226 Acute Tox. 4; H312 Skin Irrit. 2; H315 Acute Tox. 4; H332	/	C
acetone	67-64-1 200-662-2 606-001-00-8 01- 2119471330-49	10-25	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 EUH066	/	/
butan-1-ol	71-36-3 200-751-6 603-004-00-6 01- 2119484630-38	≤3	Flam. Liq. 3; H226 Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT SE 3; H335 STOT SE 3; H336	/	/
ethylbenzene	100-41-4 202-849-4 601-023-00-4	<1	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Acute Tox. 4; H332 STOT RE 2; H373	/	/
4-tert-Butylphenyl glycidyl ether	3101-60-8 221-453-2 -	<1	Skin Sens. 1; H317 Eye Irrit. 2; H319	/	/

#### Notes for substances

C	Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
U	When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned: Press. Gas (Comp.) Press. Gas (Liq.) Press. Gas (Ref. Liq.) Press. Gas (Diss.) Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

## SECTION 4: FIRST AID MEASURES

### 4.1 First aid measures

#### 4.1.1 General notes

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. No action shall be taken involving any personal risk or without suitable training.

#### 4.1.2 Following inhalation

Remove patient to fresh air - move out of dangerous area. Keep at rest in a position comfortable for breathing. If breathing is irregular or respiratory arrest occurs provide artificial respiration. Immediately consult a doctor. In case of unconsciousness bring patient into stable side position and seek medical attention.

#### 4.1.3 Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water and soap. If symptoms develop and persist, seek medical attention. Wash contaminated clothes and shoes before reuse.

#### 4.1.4 Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. Consult a physician immediately!

#### 4.1.5 Following ingestion

Not likely. Accidental ingestion: Do not induce vomiting without prior consultation with a doctor. In case of doubt or if feeling unwell seek medical help. Show the physician the safety data sheet or label.

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

#### 4.2.1 Following inhalation

Harmful. Vapours may cause drowsiness and dizziness. Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation. Coughing, sneezing, nasal discharge, labored breathing.

#### 4.2.2 Following skin contact

Irritating to the skin. Itching, redness, pain. May cause sensitisation by skin contact (itching, redness, rashes). Repeated exposure may cause dry skin or cracked skin.

#### 4.2.3 Following eye contact

On contact with eyes causes serious damage. Redness, pain, burning sensation, tearing, can cause permanent damage to the eyes.

#### 4.2.4 Following ingestion

Ingestion is unlikely because it is an aerosol. Accidental ingestion: May cause abdominal discomfort. May cause nausea/vomiting and diarrhea. Irritates mucous membranes in the mouth, throat, esophagus and in gastrointestinal area.

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

Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1 Extinguishing media

#### 5.1.1 Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>).

Fire extinguishing powder.

Water spray.

Alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### 5.1.2 Unsuitable extinguishing media

Full water jet.

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

#### 5.2.1 Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>).

### 5.3 Advice for firefighters

#### 5.3.1 Protective actions

In case of fire evacuate the area. In case of fire or heating do not breathe fumes/vapours. Vapours can form explosive mixtures with air. In case of fire aerosols can explode and be propelled to considerable distances in different directions. Cool containers at risk with water spray. If possible remove containers from endangered area. No action shall be taken involving any personal risk or without suitable training.

#### 5.3.2 Special protective equipment for fire-fighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

#### 6.1.1 For non-emergency personnel

##### Protective equipment

Use personal protective equipment (Section 8).

##### Precautionary measures

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking!

##### Emergency procedures

No action shall be taken involving any personal risk or without suitable training. Prevent access to unauthorised personnel. Prevent access to unprotected personnel. Avoid contact with skin and eyes. Do not breathe vapour or mist.

#### 6.1.5 For emergency responders

Use personal protective equipment.

### 6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

### 6.3 Methods and material for containment and cleaning up

#### 6.3.1 For containment

Stem the spill if this does not pose risks.

#### 6.3.2 For cleaning up

Collect the spray cans and hand them over to an authorized waste disposal contractor. Release of liquid because of damaged aerosol can (release of large quantities): In case of bigger spill, dam the spillage, pump the liquid into appropriate labelled containers, absorb a residue with absorbent material and dispose of according to local regulations. Do not absorb spillage with sawdust or other combustible material. Dispose in accordance with applicable regulations (see Section 13). Clean residue from spill site.

### 6.4 Reference to other sections

See also sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

#### 7.1.1 Protective measures

##### Measures to prevent fire

Ensure adequate ventilation. Take precautionary measures against static discharges. Keep away from sources of ignition - no smoking. Use spark-proof tools. Pressurized container; protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or incandescent material.

##### Measures to prevent aerosol and dust generation

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

#### 7.1.6 Advice on general occupational hygiene

Consider measures required in Section 8 of this safety data sheet. Use personal protective equipment. Refer to instructions on label and regulations for safety and health at work. Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/mist.

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

#### 7.2.1 Technical measures and storage conditions

Store in accordance with local regulations. Keep in well closed containers. Keep in cool and well ventilated area. Protect from open fire, heat and direct sunlight. Keep away from sources of ignition. Keep away from oxidising substances. Keep

away from food, drink and animal feeding stuffs.

#### 7.2.2 Packaging materials

The original container of producer.

#### 7.2.3 Requirements for storage rooms and vessels

Do not store in unlabelled containers.

### 7.3 Specific end use(s)

#### Recommendations

No information.

#### Industrial sector specific solutions

No information.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### 8.1.1 Occupational Exposure limit values

NAME	MG/M <sup>3</sup>	ML/M <sup>3</sup>	SHORT-TERM VALUE MG/M <sup>3</sup>	SHORT-TERM VALUE ML/M <sup>3</sup>	REMARK	BIOLOGICAL TOLERANCE VALUES
Xylene, o-,m-,p- or mixed isomers (1330-20-7)	220	50	441	100	Sk, BMGV	650 mmol methyl hippuric acid/mol creatinine in urine - Post shift
Acetone (67-64-1)	1210	500	3620	1500	/	/
Butan-1-ol (71-36-3)	/	/	154	50	Sk	/
Dimethyl ether (115-10-6)	766	400	958	500	/	/

#### 8.1.2 Information on monitoring procedures

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2012+A1:2015 Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents.

#### 8.1.3 DNEL/DMEL values

##### For product

No information.

##### For components

NAME	TYPE	EXPOSURE ROUTE	EXP. FREQUENCY	REMARK	VALUE
dimethyl ether	Worker	inhalation	long term systemic effects	/	1894 mg/m <sup>3</sup>
dimethyl ether	Consumer	inhalation	long term systemic effects	/	471 mg/m <sup>3</sup>
xylene	Worker	inhalation	long term systemic effects	/	221 mg/m <sup>3</sup>
xylene	Worker	inhalation	short term systemic effects	/	442 mg/m <sup>3</sup>
xylene	Worker	inhalation	long term local effects	/	221 mg/m <sup>3</sup>
xylene	Worker	inhalation	short term local effects	/	442 mg/kg/day
xylene	Worker	dermal	long term systemic effects	/	212 mg/kg bw/day
xylene	Consumer	inhalation	long term systemic effects	/	65.3 mg/m <sup>3</sup>
xylene	Consumer	inhalation	short term systemic effects	/	260 mg/m <sup>3</sup>

xylene	Consumer	inhalation	long term local effects	/	65.3 mg/m <sup>3</sup>
xylene	Consumer	inhalation	short term local effects	/	260 mg/m <sup>3</sup>
xylene	Consumer	dermal	long term systemic effects	/	125 mg/kg bw/day
xylene	Consumer	oral	long term systemic effects	/	12.5 mg/kg bw/day
acetone	Worker	dermal	long term systemic effects	/	186 mg/kg bw/day
acetone	Worker	inhalation	short term local effects	/	2420 mg/m <sup>3</sup>
acetone	Worker	inhalation	long term systemic effects	/	1210 mg/m <sup>3</sup>
acetone	Consumer	oral	long term systemic effects	/	62 mg/kg bw/day
acetone	Consumer	dermal	long term systemic effects	/	62 mg/kg bw/day
acetone	Consumer	inhalation	long term systemic effects	/	200 mg/m <sup>3</sup>

#### 8.1.6 PNEC values

For product

No information.

For components

NAME	EXPOSURE ROUTE	REMARK	VALUE
dimethyl ether	fresh water	/	0.155 mg/L
dimethyl ether	water, intermittent release	fresh water	1.549 mg/L
dimethyl ether	marine water	/	0.016 mg/L
dimethyl ether	water treatment plant	/	160 mg/L
dimethyl ether	fresh water sediment	dry weight	0.681 mg/kg
dimethyl ether	marine water sediment	dry weight	0.069 mg/kg
dimethyl ether	soil	dry weight	0.045 mg/kg
xylene	fresh water	/	0.327 mg/L
xylene	water, intermittent release	fresh water	0.327 mg/L
xylene	marine water	/	0.327 mg/L
xylene	water treatment plant	/	6.58 mg/L
xylene	fresh water sediment	dry weight	12.46 mg/kg
xylene	marine water sediment	dry weight	12.46 mg/kg
xylene	soil	dry weight	2.31 mg/kg
acetone	marine water	/	1.06 mg/L
acetone	fresh water	/	10.6 mg/L

acetone	fresh water sediment	dry weight	30.4 mg/kg
acetone	marine water sediment	dry weight	3.04 mg/kg
acetone	soil	dry weight	29.5 mg/kg
acetone	water treatment plant	/	100 mg/L
acetone	water, intermittent release	fresh water	21 mg/L

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering control

#### Substance/mixture related measures to prevent exposure during identified uses

Handle in accordance with good industrial hygiene and safety practice. Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/aerosols. Keep away from foodstuffs, beverages and feed. Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation.

#### Organisational measures to prevent exposure

If this product contains ingredients with exposure limits, personal, workplace atmosphere monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protection.

#### Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

### 8.2.6 Personal protective equipment

#### Eye and face protection

Tight fitting protective goggles (EN 166).

#### Hand protection

Protective gloves (EN 374).

#### Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345).

#### Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. If the concentration limit values are exceeded, it is necessary to wear appropriate respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387).

### 8.2.12 Environmental exposure controls

#### Substance/mixture related measures to prevent exposure

No information.

#### Instruction measures to prevent exposure

No information.

#### Organisational measures to prevent exposure

No information.

#### Technical measures to prevent exposure

No information.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Physical state

liquid - aerosol

#### 9.1.2 Colour

silver



### 9.1.3 Odour characteristic

### 9.1.4 Important health, safety and environmental information

Odour threshold	No information.
pH	No information.
Melting point/Freezing point	No information.
Initial boiling point/boiling range	No information.
Flash point	No information.
Evaporation rate	No information.
Flammability (solid, gas)	No information.
Explosion limits (vol%)	3.3 – 26.2 vol % (dimethylether) 2.1 – 13 vol % (acetone)
Vapour pressure	10 hPa at 20 °C
Vapour density	No information.
Density / weight	Density: 0.826 kg/L at 20 °C (data refers to the liquid portion of the product)
Solubility	No information.
Partition coefficient	No information.
Auto-ignition temperature	No information.
Decomposition temperature	No information.
Viscosity	No information.
Explosive properties	No information.
Oxidising properties	No information.

## 9.2 OTHER INFORMATION

No information.

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

Stable under recommended transport or storage conditions.

### 10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

### 10.3 Possibility of hazardous reactions

The product is stable under recommended storage and handling conditions.

**10.4 Conditions to avoid**

Avoid all possible sources of ignition (spark or flame). Do not expose to heat and direct sunlight.

**10.5 Incompatible materials**

HF (hydrofluoric acid).

Oxidants. Oxygen. Viton.

Strong acids. Strong reducing agents. Halogenated compounds. Alkali metal. Ethanolamine. Hydrogen peroxide. Attacks many plastics and rubbers.

**10.6 Hazardous decomposition products**

In case of fire/explosion vapours/gases that pose a health hazard are released.

**SECTION 11: TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects****(a) Acute toxicity**

For product

No information.

For components

NAME	EXPOSURE ROUTE	TYPE	SPECIES	TIME	VALUE	METHOD	REMARK
dimethyl ether	Inhalation (gases)	LC <sub>50</sub>	rat	4 h	309 mg/l	/	/
xylene	oral	LD <sub>50</sub>	rat	/	8700 mg/kg	/	/
xylene	dermal	LD <sub>50</sub>	rabbit	/	2000 mg/kg	/	/
xylene	inhalation	LC <sub>50</sub>	rat	4 h	6350 mg/l	/	/
acetone	inhalation	LC <sub>50</sub>	rat	4 h	76 mg/l	/	/
acetone	dermal	LD <sub>50</sub>	rabbit	/	> 15800 mg/kg	/	/
acetone	oral	LD <sub>50</sub>	rat	/	5800 mg/kg	OECD 401	/
butan-1-ol	oral	LD <sub>50</sub>	rat	/	790 mg/kg	/	/
butan-1-ol	dermal	LD <sub>50</sub>	rabbit	/	3400 mg/kg	/	/
butan-1-ol	inhalation	LC <sub>50</sub>	rat	4 h	8000 mg/l	/	/
ethylbenzene	oral	LD <sub>50</sub>	rat	/	3500 mg/kg	/	/
ethylbenzene	dermal	LD <sub>50</sub>	rabbit	/	15400 mg/kg	/	/
ethylbenzene	inhalation	LC <sub>50</sub>	rat	4 h	4000 ppm	/	/

**Additional information**

Harmful if inhaled.

**(b) Skin corrosion/irritation**

For product

No information.

For components

NAME	SPECIES	TIME	RESULT	METHOD	REMARK
dimethyl ether	/	/	May cause frostbite.	/	/
xylene	/	/	Irritating.	/	/
acetone	guinea pig	/	Non-irritant.	/	/
ethylbenzene	rabbit	24 h	Irritating.	/	/

**Additional information**

Causes skin irritation.

**(c) Serious eye damage/irritation**

For product

No information.

For components

NAME	EXPOSURE ROUTE	SPECIES	TIME	RESULT	METHOD	REMARK
xylene	/	/	/	Irritating.	/	/
acetone	/	rabbit	/	Irritating to eyes.	OECD 405	/
acetone	/	rabbit	/	Irritates the eyes. The occurrence of corneal injuries is possible.	OECD 405	/
ethylbenzene	/	rabbit	/	Irritating.	/	/

**Additional information**

Causes serious eye damage.

**(d) Respiratory or skin sensitisation**

For product

No information.

For components

NAME	EXPOSURE ROUTE	SPECIES	TIME	RESULT	METHOD	REMARK
acetone	-	guinea pig	/	Non sensitising.	OECD 406	/
ethylbenzene	dermal	human	/	Non sensitising.	/	/

**Additional information**

The product is not classified as sensitising. It contains at least one ingredient that can cause sensitisation. Can cause allergic reaction.

**(e) (Germ cell) mutagenicity**

For product

No information.

For components

NAME	TYPE	SPECIES	TIME	RESULT	METHOD	REMARK
dimethyl ether	/	/	/	The chemical is not classified as mutagenic.	/	/
dimethyl ether	in-vitro mutagenicity	/	/	Negative.	OECD 471	Ames test
dimethyl ether	in-vitro mutagenicity	Human (lymphocytes)	/	Negative.	cytogenetic test	OECD 473

dimethyl ether	in-vivo mutagenicity	<i>Drosophila melanogaster</i>	/	Negative.	OECD 477	/
acetone	/	Bacteria	/	The tests did not show mutagenic effects	/	/
acetone	/	Cell: Mammalian-Animal	/	The tests did not show mutagenic effects	/	/
acetone	in-vitro mutagenicity	/	/	Negative.	OECD 473	Chromosome aberration assay
acetone	in-vitro mutagenicity	Cell: Mammalian-Animal	/	Negative.	OECD 476	/
acetone	in-vitro mutagenicity	Bacteria	/	Negative.	OECD 471	/
acetone	in-vivo mutagenicity	mouse	/	Negative.	The micronucleus test	/

## (f) Carcinogenicity

For product

No information.

For components

NAME	EXPOSURE ROUTE	TYPE	SPECIES	TIME	VALUE	RESULT
dimethyl ether	/	/	/	/	/	Substance is not classified as carcinogenic.
acetone	/	/	/	/	/	Animal testing did not show any carcinogenic effects.
acetone	dermal	/	mouse	/	/	negative
ethylbenzene	/	/	/	/	/	IARC: 2B

## (g) Reproductive toxicity

For product

No information.

For components

NAME	TYPE	SPECIES	TIME	VALUE	RESULT	METHOD	REMARK
dimethyl ether	inhalation	rat	/	47 mg/L	Animal testing did not show any effects on fertility.	OECD 452	/
dimethyl ether	NOAEL	rat	/	5000 ppm	/	/	Inhalation
dimethyl ether	NOAEL	rat	/	40000 ppm	/	/	Inhalation
dimethyl ether	NOAEL	rat	/	40000 ppm	/	/	Inhalation
dimethyl ether	NOAEL	rat	/	20000 ppm	/	OECD 414	inhalation (vapor), embryo-fetal development
acetone	/	/	/	/	Animal testing did not show any effects on fertility.	/	/
acetone	/	rat	/	/	Negative.	OECD 414	/

## Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

## (h) STOT-single exposure

For product

No information.

For components

NAME	EXPOSURE ROUTE	TYPE	SPECIES	TIME	ORGAN	VALUE	RESULT	METHOD	EXPOSURE	REMARK
xylene	inhalation	/	/	/	/	/	Irritates respiratory system.	/	/	/
acetone	-	-	/	/	/	/	May cause drowsiness or dizziness.	/	/	/

## Additional information

May cause drowsiness or dizziness.

## (i) STOT-repeated exposure

For product

No information.

For components

NAME	EXPOSURE ROUTE	TYPE	SPECIES	TIME	ORGAN	VALUE	RESULT	METHOD	EXPOSURE	REMARK
dimethyl ether	Repeated dose toxicity	NOEL	rat	2 years	/	47 mg/L	/	OECD 452	/	inhalation
acetone	dermal	-	/	/	/	/	Repeated exposure may cause dry and cracked skin.	/	/	/
acetone	Repeated dose toxicity	NOAEL	rat	90 days	oral	900 mg/kg bw/day	/	/	/	/
acetone	Repeated dose toxicity	NOAEC	rat	/	/	22500 mg/m <sup>3</sup>	/	/	/	inhalation
acetone	inhalation	-	human	/	/	/	Headache, dizziness, fatigue, nausea and vomiting.	/	/	excessive exposure to vapors
acetone	dermal	-	human	/	/	/	Repeated or prolonged exposure may cause dermatitis.	/	/	/
acetone	inhalation	-	human	/	Nasal inner lining	/	Symptoms: inflammation of the mucous membranes.	/	/	/

## Additional information

STOT RE (repeated exposure): Not classified. Repeated exposure may cause skin dryness or cracking.

## (j) Aspiration hazard

For product

No information.

For components

NAME	RESULT	METHOD	REMARK
dimethyl ether	Aspiration hazard: Not Classified.	/	/

## Additional information

Aspiration hazard: Not classified.

## SECTION 12: ECOLOGICAL INFORMATION

## 12.1 Toxicity

## 12.1.1 Acute (short-term) toxicity

For product

No information.

For components

NAME	TYPE	VALUE	EXPOSURE TIME	SPECIES	ORGANISM	METHOD	REMARK
dimethyl ether	LC <sub>50</sub>	> 4.1 mg/L	96 h	fish	<i>Poecilia reticulata</i>	/	Semi-Static system
dimethyl ether	EC <sub>50</sub>	> 4.4 mg/L	48 h	crustacea	<i>Daphnia magna</i>	/	static test
dimethyl ether	EC <sub>50</sub>	755.5 mg/L	48 h	<i>Daphnia</i>	/	ECOSAR	/
dimethyl ether	EC <sub>50</sub>	154.9 mg/L	96 h	algae	/	ECOSAR ECOSAR	/
dimethyl ether	EC <sub>10</sub>	> 1600 mg/L	17 h	bacteria	<i>Pseudomonas putida</i>	/	static test
xylene	EC <sub>50</sub>	22 mg/L	48 h	crustacea	/	/	/
acetone	LC <sub>50</sub>	5540 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	/	/
acetone	LC <sub>50</sub>	11000 mg/L	96 h	fish	<i>Alburnus alburnus</i>	/	/
acetone	LC <sub>50</sub>	8800 mg/L	48 h	crustacea	<i>Daphnia magna</i>	/	/
acetone	NOEC	430 mg/L	96 h	algae	/	/	/
acetone	-	1000 mg/L	30 min	bacteria	Activated sludge	OECD 209	/
ethylbenzene	LC <sub>50</sub>	275 mg/L	96 h	fish	<i>Cyprinodon variegatus variegatus</i>	/	/
ethylbenzene	LC <sub>50</sub>	42.3 - 48.5 mg/L	96 h	fish	<i>Pimephales promelas</i>	/	/
ethylbenzene	LC <sub>50</sub>	97.1 mg/L	96 h	fish	<i>Poecilia reticulata</i>	/	/

## 12.1.4 Chronic (long-term) toxicity

For product

No information.

For components

NAME	TYPE	VALUE	EXPOSURE TIME	SPECIES	ORGANISM	METHOD	REMARK
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acetone	NOEC	2212 mg/l	28 days	crustacea	<i>Daphnia pulex</i>	/	reproduction
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## 12.1.7 Additional information

No information.

## 12.2 Persistence and degradability

## 12.2.1 Abiotic degradation, physical- and photo-chemical elimination

For product

No information.

For components

NAME	ENVIRONMENT	TYPE / METHOD	HALF TIME	EVALUATION	METHOD	REMARK
acetone	water	/	/	Degraded by hydrolysis.	/	/

## 12.2.4 Biodegradation

For product

No information.

For components

NAME	TYPE	RATE	TIME	EVALUATION	METHOD	REMARK
dimethyl ether	aerobic	5 %	28 days	not readily biodegradable	OECD 301 D	activated sludge
acetone	biodegradability	91 %	28 days	readily biodegradable	OECD 301 B	/
acetone	BOD	1900 mg/g	5 days	/	/	/
acetone	COD	2100 mg/g	/	/	/	/

## 12.2.7 Additional information

No information.

## 12.3 Bioaccumulative potential

## 12.3.1 Partition coefficient

For product

No information.

For components

NAME	MEDIA	VALUE	TEMPERATURE	PH	CONCENTRATION	METHOD
acetone	Log Pow	-0.24	/	/	/	/

## 12.3.4 Bioconcentration factor (BCF)

For product

No information.

For components

NAME	SPECIES	ORGANISM	VALUE	DURATION	EVALUATION	METHOD	REMARK
acetone	BCF	/	< 10	/	/	/	/

## 12.3.7 Additional information

No information.

## 12.4 Mobility in soil

**12.4.1 Known or predicted distribution to environmental compartments**

For product

No information.

For components

No information.

**12.4.4 Surface tension**

For product

No information.

For components

No information.

**12.4.7 Adsorption/Desorption**

For product

No information.

For components

NAME	TYPE	CRITERION	VALUE	EVALUATION	METHOD	REMARK
dimethyl ether	Soil	/	/	Moderate mobility in soil.	/	/

**12.4.10 Additional information**

No information.

**12.5 Results of PBT and vPvB assessment**

No evaluation.

**12.6 Other adverse effects**

No information.

**12.7 Additional information**

For product

Product is not classified as dangerous for environment. Water hazard class 2 (self-assessment): hazardous for water. Handle in accordance with good working practices so that the product is not released into the environment.

For components

**dimethyl ether**

Bioaccumulation is not expected. This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

**acetone**

Does not bioaccumulate. The substance is highly volatile. This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

**butan-1-ol**

Water hazard class 1 (Self-assessment): slightly hazardous for water

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****13.1.1 Product / Packaging disposal**

Waste chemical

Avoid release to the environment. Dispose of in accordance with applicable waste disposal regulation. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Product and container must be disposed of safely.

Waste codes / waste designations according to LoW



16 05 04\* - gases in pressure containers (including halons) containing dangerous substances

#### Packaging

Uncleaned containers should not be perforated, cut or welded. Pressurized container. Do not pierce or burn, even after use. Dispose of in accordance with applicable waste disposal regulation. Deliver completely emptied containers to approved waste disposal authorities.

#### Waste codes / waste designations according to LoW

15 01 11\* - metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

#### 13.1.6 Waste treatment-relevant information

No information.





#### 13.1.7 Sewage disposal-relevant information

No information.

#### 13.1.8 Other disposal recommendations

No information.

## SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
<b>14.1 UN number</b>			
UN 1950	UN 1950	UN 1950	UN 1950
<b>14.2 UN proper shipping name</b>			
AEROSOLS, <i>flammable</i>	AEROSOLS, <i>flammable</i>	AEROSOLS, <i>flammable</i>	AEROSOLS, <i>flammable</i>
<b>14.3 Transport hazard class(es)</b>			
2	2	2	2
			
<b>14.4 Packing group</b>			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
<b>14.5 Environmental hazards</b>			
NO	NO	NO	NO
<b>14.6 Special precautions for user</b>			
Limited quantities 1 L Transport category 2 Tunnel restriction code (D)	Limited quantities 1 L EmS F-D, S-U Special provisions 190, 327, 344, 625 Packing Instructions P207, LP200 Special packing provisions PP87, RR6, L2	Limited Quantity Packing Instructions Y203 Limited Quantity Net Qty 30 kg G Passenger Packing Instruction Packing Instructions 203 Passenger Packing Instruction Net Qty 25 kg Special provisions A145, A167, A802	Limited quantities 1 L

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code			
Goods may not be carried in bulk in bulk containers, containers or vehicles.	Goods may not be carried in bulk in bulk containers, containers or vehicles.	Not given/not applicable	Not given/not applicable

## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)(including last amendment Commission Regulation (EU) 2015/830)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline) not applicable

### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: OTHER INFORMATION

### Indication of changes

No information.

### Key literature references and sources for data

No information.

### Abbreviations and acronyms

ATE - Acute Toxicity Estimate

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CEN - European Committee for Standardisation

C&L - Classification and Labelling

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

CAS# - Chemical Abstracts Service number

CMR - Carcinogen, Mutagen, or Reproductive Toxicant

CSA - Chemical Safety Assessment

CSR - Chemical Safety Report

DMEL - Derived Minimal Effect Level

DNEL - Derived No Effect Level

DPD - Dangerous Preparations Directive 1999/45/EC

DSD - Dangerous Substances Directive 67/548/EEC

DU - Downstream User

EC - European Community

ECHA - European Chemicals Agency

EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)

EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)

EEC - European Economic Community

EINECS - European Inventory of Existing Commercial Substances

ELINCS - European List of notified Chemical Substances

EN - European Standard

EQS - Environmental Quality Standard

EU - European Union

Euphrac - European Phrase Catalogue

EWC - European Waste Catalogue (replaced by LoW – see below)

GES - Generic Exposure Scenario  
GHS - Globally Harmonized System  
IATA - International Air Transport Association  
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air  
IMDG - International Maritime Dangerous Goods  
IMSBC - International Maritime Solid Bulk Cargoes  
IT - Information Technology  
IUCLID - International Uniform Chemical Information Database  
IUPAC - International Union for Pure Applied Chemistry  
JRC - Joint Research Centre  
Kow - octanol-water partition coefficient  
LC50 - Lethal Concentration to 50 % of a test population  
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
LE - Legal Entity  
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)  
LR - Lead Registrant  
M/I - Manufacturer / Importer  
MS - Member States  
MSDS - Material Safety Data Sheet  
OC - Operational Conditions  
OECD - Organization for Economic Co-operation and Development  
OEL - Occupational Exposure Limit  
OJ - Official Journal  
OR - Only Representative  
OSHA - European Agency for Safety and Health at work  
PBT - Persistent, Bioaccumulative and Toxic substance  
PEC - Predicted Effect Concentration  
PNEC(s) - Predicted No Effect Concentration(s)  
PPE - Personal Protection Equipment  
(Q)SAR - Qualitative Structure Activity Relationship  
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
RIP - REACH Implementation Project  
RMM - Risk Management Measure  
SCBA - Self-Contained Breathing Apparatus  
SDS - Safety data sheet  
SIEF - Substance Information Exchange Forum  
SME - Small and Medium sized Enterprises  
STOT - Specific Target Organ Toxicity  
(STOT) RE - Repeated Exposure  
(STOT) SE - Single Exposure  
SVHC - Substances of Very High Concern  
UN - United Nations  
vPvB - Very Persistent and Very Bioaccumulative

#### List of relevant H phrases

H220 Extremely 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.  
H317 May cause an allergic skin reaction.  
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.