

RUST CONVERTER SPRAY

SECTION 1: SUBSTANCE/MIXTURE IDENTIFICATION AND MANUFACTURER/SUPPLIER IDENTIFICATION

1.1. Product identification

RUST CONVERTER SPRAY

UFI: CVW0-00V7-Y00M-3WJ6

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

No further relevant data available.

Application of the substance / the mixture: Aerosol coating.

1.3 Data of the safety data sheet supplier

Przedsiębiorstwo RANAL Sp. z o.o.

ul. Łódzka 3

42-240 Rudniki k. Częstochowy, PL

Tel.: +48 34 329 45 03

Fax: +48 34 320 12 16

Registration number: 000029202

Person responsible for the safety data sheet: ranal@ranal.pl

1.4. Emergency telephone

+48 34 322 28 77 (8.00 -15.00)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture.

Classification according to the regulation (EC) no 1272/2008:



GHS02 flame

Aerosol 1

H222-H229

Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS08 health hazard

STOT RE 2

H373 May cause damage to organs through prolonged or repeated exposure.



GHS05 corrosive effect

Eye Dam. 1

H318 Causes serious eye damage.



GHS07

Skin Irrit. 2

H315 Causes skin irritation.

Skin Sens. 1

H317 May cause an allergic skin reaction.

STOT SE 3

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

Asp. Tox. 1

H304 May be fatal if swallowed and enters airways.

2.2. Label elements

Classification according to the regulation (EC) no 1272/2008:

The product has been classified and labelled according to CLP regulation.

Pictograms:



Signal word: **DANGER.**

Label elements specifying the type of hazard:

Butan-1-ol*.

Reaction mass of ethylbenzene and xylene*.

Phenol, 4,4'-(1-methylethylidene)bis-polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenylene oxymethylene)]bis[oxirane].

Acetone.

Hazard statements:

H222-H229

Extremely flammable aerosol. Pressurised container: May burst if heated.

H315

Causes skin irritation.

H318

Causes serious eye damage.

RUST CONVERTER SPRAY

H317 May cause an allergic skin reaction.
H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statements:

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P210 Keep away from sources of heat/sparks/open flames/hot surfaces. - No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn even after use.
P260 Do not breathe mist/vapours/spray.
P271 * Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/eye protection.
P302+P352 IF ON SKIN: wash skin and plenty of water and soap.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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* Call a POISON CENTER/doctor if you feel unwell.
P403 Store in a well-ventilated place.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C (122°F).
P501 Dispose of the contents in accordance with local/regional/national/international regulations.

2.3. Other hazards

Results of PBT and vPvB assessment:

PBT: Not applicable.
vPvB: Not applicable.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Description: Mixture of biocatalysts with liquid propellant. *

Substance name
Concentration [% weight]
Identification numbers
Classification and labelling

Dimethyl ether
25-< 50%
CAS: 115-10-6
EINECS: 204-065-8
Reg.No: 01-2119472128-37
Flam. Gas 1, H220; Press. Gas (Comp.), H280.

Acetone
10-< 25%
CAS: 67-64-1
EINECS: 200-662-2
Reg.No: 01-2119471330-49
Flam. Liq. 2, H225; Eye Irrit. 2; H319; STOT SE 3, H336.

Reaction mass of ethylbenzene and xylene*
10-< 25%
EC number: 905-588-0
Reg.No: 01-2119488216-32
01-2119486136-34
Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335.

Propane-2-ol
2.5-< 10%
CAS: 67-63-0
EINECS: 200-661-7
Reg.No: 01-2119457558-25
Flam. Liq. 2, H225; Eye Irrit. 2; H319; STOT SE 3, H336.

1-Methoxy-2-propan-1-ol*
2.5-< 10%
CAS: 107-98-2
EINECS: 203-539-1
Reg.No: 01-2119457435-35
Flam. Liq. 3, H226; STOT SE 3, H336.

RUST CONVERTER SPRAY

Butan-1-ol*
≥3-<10%
CAS: 71-36-3
EINECS: 200-751-6
Reg.No: 01-2119484630-38
Flam. Liq. 3, H226; Eye Dam. 1, H318; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2; H315; STOT SE 3, H335-H336.

Tannins *
2.5-< 10%
CAS: 1401-55-4
EINECS: 215-753-2
Eye Irrit. 2, H319.

Phenol, 4,4'-(1-methylethyidene)bis-polymer with 2,2'-[(1-methylethyidene)bis(4,1-phenylene oxymethylene)]bis[oxirane]
1-< 2.5%
CAS: 25036-25-3
Reg.No: Exempt (Annex V)
Skin Irrit. 2, H315; Eye Irrit. 2, H319; Skin Sens. 1, H317.

2-methylpropan-1-ol *
0.1-< 1%
CAS: 78-83-1
EINECS: 201-148-0
Reg.No: 01-2119484609-23
Flam. Liq. 3, H226; Eye Dam. 1, H318; Skin Irrit. 2; H315; STOT SE 3, H335-H336.

Xylene*
0.1-< 1%
CAS: 1330-20-7
EINECS: 215-535-7
Reg. no: 01-2119488216-32,
Flam. Liq. 3, H226; STOT RE 2, H373; Asp. Tox. 1, H304; Acute, Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319;
STOT SE 3, H335

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information: Symptoms of poisoning may appear even after several hours; therefore, the injured person should be under medical observation for at least 48 hours after the accident.

Inhalation: Supply plenty of fresh air and call a doctor for safety reasons. In case of loss of consciousness place and transport in stable recovery position.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persists, consult a doctor.

After swallowing: Do not induce vomiting; call for medical help immediately.

4.2. Most important symptoms both acute and delayed

No further relevant data available.

4.3. Indications of any immediate medical attention and special treatment needed

No further relevant data available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing agents: Water mist. Extinguishing powder. Carbon dioxide. Alcohol resistant foam.
Extinguishing agents unsuitable for safety reasons: Full jet of water.

5.2. Special hazards arising from the substance or mixture

No further relevant data available.

5.3. Advice for fire fighters

Protective equipment: Respiratory protection.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency measures

Use protective equipment. Keep away people without protective equipment.

RUST CONVERTER SPRAY

6.2. Environmental precautions

Do not allow product to reach sewage system or water courses. Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.

6.3 Methods and materials for containment and cleaning up

Remove contaminated material as waste in accordance with Section 13 of the Data Sheet.
Provide adequate ventilation. Do not rinse with water or water based cleaning agents.*

6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See section 13 for information on disposal considerations.

SECTION 7: HANDLING AND STORAGE OF SUBSTANCES AND MIXTURES

7.1. Precautions for safe handling

Provide good ventilation / exhaustion in the workplace.

Information about fire and explosion protection:

Do not spray onto a naked flames or any incandescent material.

Keep ignition sources away - do not smoke.

Protect against static discharges.

Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, e.g. electric lights.

Do not pierce or burn even after use.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: Store in a cool location. Observe official regulations on storing pressurised containers.

Information about storage in one common storage facility: Observe official regulations on storing pressurised containers.

Further information about storage conditions: Store in cool, dry conditions in well-sealed receptacles. Protect from heat and direct sunlight.

7.3 Special end use (s)

No further relevant data available.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

8.1. Control parameters

Components with limit values that require monitoring at the workplace*:

115-10-6 dimethyl ether	MPIC: ---	MPC: 1000 mg/m ³	
67-64-1 Acetone	MPIC: 1800 mg/m ³	MPC: 600 mg/m ³	
67-63-0 propan-2-ol	MPIC: 1200 mg/m ³	MPC: 900 mg/m ³	skin
107-98-2 1-methoxypropan-2-ol	MPIC: 360 mg/m ³	MPC: 180 mg/m ³	skin
71-36-3 butan-1-ol	MPIC: 150 mg/m ³	MPC: 50 mg/m ³	skin
78-83-1 2-methylpropan-1-ol	MPIC: 200 mg/m ³	MPC: 100 mg/m ³	skin
1330-20-7 Xylene	MPIC: 200 mg/m ³	MPC: 100 mg/m ³	skin

DNEL:

67-64-1 Acetone

Oral	DNEL Long-term systemic	62 mg/kg bw/day	(Consumer)
Dermal	DNEL Long-term systemic	62 mg/kg bw/day	(Consumer)
		186 mg/kg bw/day	(Worker)
Inhalation	DNEL Acute local	2420 mg/m ³	(Worker)
	DNEL Long-term systemic	200 mg/m ³	(Consumer)
		1210 mg/m ³	(Worker)

Reaction mass of ethylbenzene and xylene*

Oral	DNEL Long-term systemic	1.6 mg/kg bw/day	(Consumer)
Dermal	DNEL Long-term systemic	108 mg/kg bw/day	(Consumer)
		180 mg/kg bw/day	(Worker)
Inhalation	DNEL Acute-systemic*	174 mg/m ³	(Consumer)
		289 mg/m ³	(Worker)
	DNEL Acute local	289 mg/m ³	(Worker)
	DNEL Long-term systemic	14.8 mg/m ³	(Consumer)
		77 mg/m ³	(Worker)
	DNEL Long-term-local*	174 mg/m ³	(Consumer)
		221 mg/m ³	(Worker)

67-63-0 propan-2-ol

Oral	DNEL Long-term systemic	26 mg/kg bw/day	(Consumer)
Dermal	DNEL Long-term systemic	319 mg/kg bw/day	(Consumer)
		888 mg/kg bw/day	(Worker)

RUST CONVERTER SPRAY

Inhalation DNEL Long-term systemic 89 mg/m³ (Consumer)
 500 mg/m³ (Worker)

107-98-2 1-methoxypropan-2-ol*

Oral DNEL Long term-systemic 3.3 mg/kg bw/ day (Consumer)
 Skin DNEL Long term-systemic 18.1 mg/kg bw/day (Consumer)
 50.6 mg/kg bw/day (Worker)
 inhalation DNEL Acute-local 553.5 mg/ m³ (worker)
 DNEL Long term-systemic 43.9 mg/ m³ (Consumer)
 369 mg/m³ (Worker)

71-36-3 butanol

Oral DNEL Long-term systemic 3125 mg/kg bw/day (Consumer*)
 0.3 mg/kg bw/day* (Worker)
 Skin* DNEL Long-term systemic 2.7 mg/kg bw/day (Consumer)
 5.5 mg/kg bw/day (Worker)
 Inhalation DNEL Acute-systemic* 159.8 mg/m³ (Consumer)
 214 mg/m³ (Worker)
 DNEL Long term-systemic* 0.5 mg/m³ (Consumer)
 2.7 mg/m³ (Worker)
 DNEL Long-term - local* 55 mg/m³ (Consumer)
 310 mg/m³ (Worker)

PNEC:

67-64-1 Acetone

PNEC Freshwater sediment 30.4 mg/kg (Unspecified)
 PNEC Sea water 1.06 mg/l (Unspecified)
 PNEC Sea water sediment 3.04 mg/l (dry mass) * (Unspecified)
 PNEC Soil 29.5 mg/kg (Unspecified)

Product of reaction mass of ethylbenzene and xylene

PNEC Fresh water 0.327 mg/l (Unspecified)
 PNEC Sea water 0.327 mg/l (Unspecified)
 PNEC Sea water sediment 12.46 mg/l (dry mass) (Unspecified)
 PNEC Soil 2.31 mg/kg (Unspecified)
 PNEC Sewage treatment plant 6.58 mg/l (Unspecified)
 PNEC Sea water sediment 12.46 mg/l (dry mass) (Unspecified)

107-98-2 1-methoxypropan-2-ol*

PNEC Fresh water 10 mg/l (Unspecified)
 PNEC Fresh water sediment 41.6 mg/l (dry mass) (Unspecified)
 PNEC Soil 2.47 mg/kg (Unspecified)

Components with biological limit values:

Additional exposure limits with possible technological hazards*:

100-41-4 Ethylbenzene MPIC: 400 mg/m³ MPC: 200 mg/m³ skin
108-88-3 Toluene MPIC: 200 mg/m³ MPC: 100 mg/m³ skin

Additional information: The lists valid during the making were used as basis.

8.2. Exposure control

Technical control measures*: No further data, see section 7.

Personal protection equipment:

General measures of protection and hygiene: Keep away from foodstuffs, beverages and feed. Take off immediately all contaminated clothing. Wash hands before each break and at the end of work. Do not breathe gases/smoke/spray. Avoid contact with the eyes. Avoid contact with the eyes and skin. General ventilation*.

Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.
 A/P2 filter

Hands protection:



Protective gloves.

Gloves resistant to solvents.

Material of which the gloves are made: The choice of the appropriate gloves depends on the permeation time, diffusion and disintegration rate. Material of gloves nitrile rubber*. Penetration time of the glove material. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

RUST CONVERTER SPRAY

The choice of the appropriate gloves depends on the permeation time, diffusion and disintegration rate.

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation composed of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked before use.

Nitrile rubber, NBR. Recommended thickness of the material: ≥ 0.5 mm.

Penetration time of the glove material:

For continuous contact we recommend gloves with breakthrough time of at least 240 minutes, with the preference given to a breakthrough time greater than 480 minutes. The same recommendations apply for short contact or splash protection. We are aware that suitable gloves that offer this level of protection may not be available. In this case, a shorter breakthrough time is acceptable, while maintaining the maintenance procedures and temporarily replacing the gloves. The thickness of the gloves is not a good measure of their resistance against chemical agents, because this depends on the exact composition of the material from which the gloves are made. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Information on the exact penetration time should be obtained from the glove manufacturer and has to be observed.

Eyes protection:



Tightly sealed protective glasses. *

Body protection:

Use protective clothing (EN-13034/6).

It is recommended to use antistatic, chemical and oil-resistant clothing as well as safety shoes. (EN1149; EN340&EN ISO 13688; 13034-6).*

Environmental control*:

Use an appropriate container to prevent environmental contamination.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties*

General information:

Appearance:

Form:	Aerosol
Colour:	Light brown
Odour:	Characteristic
Odour threshold:	Not determined.
Melting /freezing point:	Not determined.
Boiling point or initial boiling point and boiling range:*	-24.8 °C (115-10-6 dimethyl ether)
Flammability of materials*:	Not applicable.
Explosion limits:	bottom: 1.1 Vol %, top: 20 Vol %
Flash point:	-42°C
Auto ignition point:	235°C *
pH - value at 20°C:	2.5
Dynamic viscosity:	Not determined.
Kinematic viscosity:	$\leq 20.5 \text{ mm}^2/\text{s}^2$ 40°C (L) *
Solubility in/miscibility with water	Not miscible or difficult to mix.
n-octanol/water partition coefficient (Log Kow):	Not determined.
Vapour pressure at 20 °C:	3300 hPa *
Vapour pressure at 50 °C*:	6500 hPa *
Density at 20°C:	0.794 g/cm ³ *
Relative density	not specified.
Vapour density	not specified

9.2 Other information

Form: Aerosol

Important information on health and environment protection and safety*:

Ignition temperature:	The product is not self-igniting.
Explosive properties:	The product is not explosive, but may form explosive mixtures with the air
Organic solvents:	85.5%.
Water:	4.4%.
Solids content:	10.5%.
Evaporation rate:	Not applicable.

Information with regard to physical hazard classes*:

Explosives:	none
Flammable gases:	none
Aerosols:	Extremely flammable aerosol. Pressurized container: May burst if heated.
Oxidizing gases:	none
Gases under pressure:	none

RUST CONVERTER SPRAY

Flammable liquids:	none
Flammable solids:	none
Self-reactive substances and mixtures:	none
Pyrophoric liquids:	none
Pyrophoric solids:	none
Self-heating substances and mixtures:	none
Substances and mixtures which emit flammable gases in contact with water:	none
Oxidizing liquids:	none
Oxidizing solids:	none
Organic peroxides:	none
Substances corrosive to metals:	none
Desensitised explosives:	none

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No further relevant data available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided: no decomposition when used as intended.

10.3. Possibility of hazardous reactions

Hazardous reactions unknown.

10.4. Conditions to be avoided

No further relevant data available.

10.5. Incompatible materials:

No further relevant data available.

10.6. Hazardous decomposition products

Hazardous decomposition products unknown.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on the hazard classes defined in Regulation (EC) No 1272/2008*

Acute toxicity: No further relevant data available.

LD/LC50 values relevant for classification:

67-64-1 Acetone

Oral	LD50	5800 mg/kg	(Rat) (Acute Oral Toxicity)*
	ATE*	5800 mg/kg	(Rat)
Dermal	LD50	7800 mg/kg	(rabbit)
	ATE*	20000 mg/kg	(nd)
		> 15800 mg/kg	(Rabbit)
Inhalation	LC50/4h	> 20 mg/l	(rat)
	ATE*	76 mg/l, 4h	(rat)

--- Reaction mass of ethylbenzene and xylene*

Oral	LD50	3523 mg/kg *	(rat)
Dermal	LD50	12126 mg/kg *	(rabbit)
Inhalation*	LD50 (4h)	29000 mg/l	(rat)

67-63-0 propan-2-ol

Oral	LD50	5840 mg/kg	(Rat) (Acute Oral Toxicity)*
Dermal	LD50	13900 mg/kg	(Rabbit) (Acute Dermal Toxicity)*
Inhalation	LC50(4h)*	> 25 mg/l *	(rat)
	LC50	> 25 mg/l	(Rat) (Acute Oral Toxicity)

107-98-2 1-methoxypropan-2-ol*

Oral	LD50	4016 mg/kg	(Rat)
Dermal	LD50	> 2000 mg/kg	(Rat)
Inhalation	LC50(4h)	28.8 mg/l	(Rat)
	LC50 (6h)	27596 mg/m3	(Rat)

71-36-3 butan-1- ol*

Oral	LD50	2292 mg/kg	(rat)
Dermal	LD50	3430 mg/kg	(rabbit)
Inhalation	LC50/4h	21 mg/l *	(rat)

1401-55-4 Tannins *

Oral	LD50	2260 mg/kg bw	(Rat)
	LC50	2260 mg/kg bw	(Rat)

RUST CONVERTER SPRAY

25036-25-3 Phenol, 4,4'-(1-methylethylidene)bis-polymer with 2,2'-[(1-methylethylidene)bis(4,1-phenylene oxymethylene)] bis[oxirane] *

Oral	LD50	> 2000 mg/kg	(Rat)
Dermal	LD50	> 2000 mg/kg	(Rat)

The main harmful effects:

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Causes serious eye damage.
Allergic effect on airways or skin: May cause an allergic skin reaction.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

Mutagenic effect on germ cells: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.
Harmful effect on reproduction: Based on available data, the classification criteria are not met.
STOT- single exposure: May cause respiratory irritation. May cause drowsiness or dizziness.
STOT- repeated exposure: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard: May be fatal if swallowed and enters airways.

11.2. Information on other hazards*

Endocrine disrupting properties: None of the components is listed*

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Aquatic toxicity:

67-64-1 Acetone		
EC50	8800 mg/l	(Daphnia magna)
	8300 mg/l (96h)	(Fish)

--- Reaction mass of ethylbenzene and xylene*

NOEC	1.3 mg/l	(Fish)
NOEC (7 days)	0.96 mg/l	(Daphnia magna)
NOEC (72h)	0.44 mg/l	(algae)
NOEC (28 d)	16 mg/l	(bacteria)
LC50/96h	8.9-16.4 mg/l	(Pimephales promelas)
EC50/48h	3.2-9.5 mg/l	(Daphnia magna)

67-63-0 propan-2-ol		
EC50 *	>100 mg/l	(bacteria)
LOEC (8 days)	1000 mg/l	(algae)
LC50 (24h)	9714 mg/l	(Daphnia magna)
LC50/ 96h	9640 mg/l	(Pimephales promelas)

107-98-2 1-methoxypropan-2-ol*		
LC50 (96h) (static)	6812 mg/l	(Leuciscus idus)
	>1000 mg/l	(Oncorhynchus mykiss) (Fish, Acute Toxicity Test)
	20800 mg/l	(Pimephales promelas)
EC50 (48h)	23300 mg/l	(Daphnia magna)
LC50 (48h) (static)	21100-25900 mg/l	(Daphnia magna)

71-36-3 butan-1- ol*		
NOEC (21 days)	4.1 mg/l	(Daphnia magna)
LC50/ 96h	1376 mg/l	(Pimephales promelas)
EC50/ 48h	1328 mg/l	(Daphnia magna)
EC50	225 mg/l (72 h)	(Selenastrum capricornatum)

12.2. Persistence and degradability

Not easily biodegradable.*

12.3. Bioaccumulative potential

No further relevant data available.

12.4. Mobility in soil

No further relevant data available.*

12.5 Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

12.6. Endocrine disrupting properties*

The product does not contain substances with endocrine disrupting properties.

12.7. Other hazardous effects*

General information:

Water hazard class 2 (Self-assessment): hazardous to water.

Do not allow the product to reach ground water, surface water or sewage system.

Dangerous to drinking water if even small quantities leak into the ground.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Recommendation: Must not be disposed of with municipal waste. Do not allow the product to reach sewage system.

European waste catalogue*:

HP3 Flammable

HP4 Irritating - causing skin irritation and eye damage.

HP5 Specific Target Organ Toxicity (STOT) or aspiration hazard.

Contaminated packaging:

Recommendation: Dispose of according to applicable regulations.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number or ID number*

ADR, IMDG, IATA: UN1950

14.2. UN proper shipping name

ADR: UN1950 AEROSOLS

IMDG: AEROSOLS *

IATA: AEROSOLS, flammable*

14.3 Transport hazard class (-es)

ADR:



Class: 2.5F Gases.

Label: 2.1

ADN*:

Class ADN/R: 2.5F

IMDG, IATA:



Class: 2.1 gases

Label: 2.1

14.4. Packaging group

None.

14.5. Environmental hazards

Not applicable.

14.6. Special precautions for users

Warning: Gases.

Hazard code (Kemler): -

EMS Number: F-D,S-U

Stowage Code:

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A.

For AEROSOLS with a capacity above 1 litre: Category B.

For WASTE AEROSOLS: Category C, Clear of living quarters.

Segregation Code:

SG69

For AEROSOLS with a maximum capacity of 1 litre: Segregation as for Class 9. Stow "separated from" "class 1 except for division 1.4.

For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2.

For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

14.7. Sea transport in bulk in accordance with IMO instruments*

Not applicable.

Transport/Additional information:

ADR:

Limited quantities (LQ) 1L

Excepted quantities (EQ): Code: E0; Not permitted as excepted quantities

Transport category: 2

Tunnel restriction code: code D

IMDG:

Limited quantities (LQ) 1L

Excepted quantities (EQ): Code: E0; Not permitted as excepted quantities

UN 'Model Regulation': UN1950, AEROSOLS, 2.1

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations / legislations specific for the substance or mixture

Directive 2012/18/EU:

Listed hazardous substances - ANNEX I:

None of the components are listed.

Seveso category

P3a FLAMMABLE AEROSOLS

Qualifying quantity (tonnes) for the application of lower-tier requirements

150 t

Qualifying quantity (tonnes) for the application of upper-tier requirements

500 t

Regulation (EC) no 1907/2006 ANNEX XVII:

Restriction conditions: 3 *

DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II*: none of the components are listed.

REGULATION (EU) 2019/1148*

Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit for the purpose of licensing according to Article 5 item 3): None of the components are listed.

Annex II - EXPLOSIVE PRECURSORS SUBJECT TO NOTIFICATION: 67-64-1 acetone.

Regulation (EC) No 273/2004 on drug precursors*: 67-64-1 Acetone 3

Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors*: 67-64-1 Acetone

Employment Limitation Tips - national regulations*:

Class	share %
Water	2.5-<10
NK	75-<100

VOC-CH 85,00 %

VOC-EU 676,0 g/l

Danish MAL Code 4-5

15.2. Chemical safety assessment:

Chemical safety assessment has not been performed.

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, it does not definitively define the production characteristics and cannot be used as a justification for valid contracts.

Relevant phrases:

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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye damage.
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.
EUH066*	Repeated exposure may cause skin dryness or cracking.

Classification according to the Regulation (EC) no 1272/2008*:

Physical and chemical properties: The classification is based on the results of the mixtures tested. Health hazards, Environmental hazards: The method of classification of mixtures based on the constituents of the mixture (sum formula).

Explanation of abbreviations and acronyms:

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
IMDG:	International Maritime Code for Dangerous Goods.
IATA:	International Air Transport Association.
GHS:	Globally Harmonised System of Classification and Labelling of Chemicals.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
ELINCS:	European List of Notified Chemical Substances.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
MAL-Code:	Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation on the labeling of inhalation hazards, Denmark).
DNEL:	Derived No-Effect Level (REACH).
PNEC:	Derived No-Effect Level (REACH).
LC50:	Lethal concentration, 50 percent.
LD50:	Lethal dose, 50 percent.
PBT:	Persistent, Bio-accumulative and toxic.
vPvB:	very Persistent and very Bio-accumulative.
Flam. Gas 1:	Flammable gases- Category 1.
Aerosol 1:	Aerosols - Category 1.
Press. Gas (Comp.):	Gases under pressure - Compressed gas.
Flam. Liq. 2:	Flammable liquids- Category 2.
Flam. Liq. 3:	Flammable liquids- Category 3.
Acute Tox. 4:	Acute toxicity - Category 4.
Skin Irrit. 2:	Skin corrosion/irritation - Category 2.
Eye Dam. 1:	Serious eye damage/eye irritation- Category 1.
Eye Irrit. 2:	Serious eye damage/eye irritation- Category 2.
Skin Sens. 1:	Allergic skin reaction - Category 1.
STOT SE 3:	Specific target organ toxicity (single exposure) - Category 3.
STOT RE 2:	Specific target organ toxicity (repeated exposure) - category 2.
Asp. Tox. 1:	Aspiration hazard - Category 1.

Changes in the Sheet compared to the previous version:

Update of sections:

9: rewording of sub-section 9.1: Information on basic physical and chemical properties

11: rewording of sub-section 11.1: Information on the hazard classes defined in Regulation (EC) No 1272/ 2008: added subsection 11.2.

Information on other hazards

12: new subsection 12.6: Endocrine disrupting properties.

14: rewording of sub-section 14.1: UN number or ID number; rewording of sub-section 14.7: Sea transport in bulk in accordance with IMO instruments.

Changes in the content of sections:

1.1, 2.2, 3.2, 8.1, 8.2, 9.1, 9.2, 11.1, 11.2, 12.1, 12.2, 12.3, 12.6, 12.7, 13.1, 14.1, 14.2, 14.3, 14.6, 14.7, 15.1, 16.

General update.

Sheet number: 07-1N6L-0123-V4