

## SECTION 1. MIXTURE IDENTIFICATION AND MANUFACTURER/SUPPLIER IDENTIFICATION

### 1.1. Product identification:

**ZINC SPRAY**

**UFI: A7Y0-30WK-V00J-PCV7 \***

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

Aerosol coating. Paint.

### 1.3 Data of the safety data sheet supplier

**Przedsiębiorstwo RANAL Sp. z o.o.**

Ul. Łódzka 3

42-240 Rudniki, PL

Tel.: +48 34 329 45 03

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Registration number 000029202

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

### 1.4. Emergency telephone

+ 48 34 329 45 03 (8:00 -15:00)

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Classification according to The EC Regulation 1272/2008 of 16 December 2008 on classification, labelling and packaging (CLP).



GHS02 flame

Aerosol 1

H222-H229

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



GHS09 environment

Aquatic Acute 1

H400

Very toxic to aquatic life.

Aquatic Chronic 1

H410

Very toxic to aquatic life with long lasting effects.



GHS07

Eye Irrit. 2

H319

Causes eye irritation.

STOT SE 3

H336

May cause drowsiness or dizziness.

### 2.2. Label elements

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

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

Hazard pictograms:



GHS02

GHS07

GHS09

Signal word: **Danger**.

Components indicating hazard for labelling:

Acetone.

Hydrocarbons, C9,aromatics

Propane-2-ol.

Hazard statements:

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H319 Causes eye irritation.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

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 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 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.

P304+P340

IF INHALED: Remove person to fresh air and keep 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 or doctor/physician 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 contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH066

Repeated exposure may cause skin dryness or cracking.

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

Mixture of biocatalysts with liquid propellant.

Hazardous components	Classification	H phrases	% weight
Dimethyl ether	CAS: 115-10-6 EINECS: 204-065-8 Reg. no: 01-2119472128-37	Flam. Gas 1A, H220; Press. Gas (Liq), H280	25-<50
Zinc powder -zinc dust (stabilized)	CAS: 7440-66-6 EINECS: 231-175-3 Reg. no: 01-2119467174-37	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	25-<50
Acetone	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, EUH066	10-< 25
Hydrocarbons,C9,aromatics	CAS: 128601-23-0 EC number 918-668-5 Reg. no: 01-2119455851-35	Flam. Liq. 3, H226; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335-H336, EUH066	2.5-<10
Reaction mass of ethylbenzene and xylene	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	2.5-<10
Propane-2-ol	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-< 2.5
Xylene*	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	1-<2.5
Ethylbenzene*	CAS: 100-41-4 EINECS: 202-849-4 Reg. no: 01-2119489370-35	Flam. Liq. 2, H225; STOT RE 2, H373; Asp. Tox. 1, H304, Acute Tox. 4, H332; Aquatic Chronic 3, H412	0.1-<1
Propylene glycol* Substance with the Community workplace exposure limit	CAS: 57-55-6 EINECS: 200-338-0 Reg. no: 01-2119456809-23		0.1-<1

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

**After inhalation:** Supply fresh air; consult doctor in case of complaints.  
**After skin contact:** Generally the product does not irritate the skin.  
**After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.  
**After swallowing:** Do not induce vomiting; call for medical help immediately.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing agents: Water mist, extinguishing powder, carbon dioxide, foam resistant to alcohol.  
Unsuitable extinguishing media: 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**

Special protective equipment: Wear respiratory protection.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1. Personal precautions, protective equipment and emergency measures**

Wear protective clothing. Move unprotected persons to a safe place. \*

### **6.2. Environmental precautions**

Do not allow the product to reach sewage system water reservoirs.  
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**

Ensure adequate ventilation. \*

### **6.4. Reference to other sections**

Information on safe handling see section 7.  
Information on personal protective measures see section 8.  
Information on disposal see section 13.

## **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 flame or any incandescent material. Keep ignition sources away - Do not smoke. Protect against electrostatic charges. Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. 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 packaging with pressurised containers.

#### **Information about storage in one common storage facility:**

Observe official regulations on storing packaging with 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 uses**

No further relevant data available.

## **SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES**

### **8.1. Control parameters**

**Components with limit values that require monitoring depending on the workplace:**

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

#### **115-10-6 dimethyl ether**

MPC: 1000 mg/m<sup>3</sup>

#### **67-64-1 Acetone**

MPIC: 1800 mg/m<sup>3</sup>

MPC: 600 mg/m<sup>3</sup>

#### **67-63-0 propan-2-ol**

MPIC: 1200 mg/m<sup>3</sup>

MPC: 900 mg/m<sup>3</sup>

Skin

#### **1330-20-7 xylene\***

MPIC: 200 mg/m<sup>3</sup>

MPC: 100 mg/m<sup>3</sup>

Skin

#### **100-41-4 Ethylbenzene\***

MPIC: 400 mg/m<sup>3</sup>

MPC: 200 mg/m<sup>3</sup>

Skin

#### **57-55-6 Propylene glycol\***

MPC: 100 mg/m<sup>3</sup>

vapours and inhalable fraction

#### **Regulatory information\*:**

MPC: Official Journal 2021, item 325, 18/02/2021

**DNEL values\*:**

**7440-66-6 zinc powder -zinc dust (stabilized)**

Oral DNEL Long term systemic	50 mg/kg bw/ day	(Workers)
Skin DNEL Long term systemic	5000 mg/kg bw/day	(Consumer)
	5000 mg/kg bw/day	(Worker)
Inhalation DNEL Long-term systemic	2.5 mg/m <sup>3</sup>	(Consumer)
	5 mg/m <sup>3</sup>	(Worker)

**67-64-1 Acetone**

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

**128601-23-0 Hydrocarbons,C9,aromatics**

Oral DNEL Long term systemic	11 mg/kg bw/ day	(Consumers)
Skin DNEL Long term systemic	11 mg/kg bw/day	(Consumer)
	25 mg/kg bw/day	(Worker)
Inhalation DNEL Long-term systemic	32 mg/m <sup>3</sup>	(Consumer)
	100 mg/m <sup>3</sup>	(Worker)

**Reaction mass of ethylbenzene and xylene\***

Oral DNEL Long term systemic	1.6 mg/kg bw/ day	(Consumers)
Skin DNEL Long term systemic	108 mg/kg bw/day	(Consumer)
	180 mg/kg bw/day	(Worker)
Inhalation DNEL Acute systemic	174 mg/m <sup>3</sup>	(Consumer)
	289 mg/m <sup>3</sup>	(Worker)
DNEL Acute-local	289 mg/m <sup>3</sup>	(worker)
DNEL Long term-systemic	14.8 mg/m <sup>3</sup>	(Consumer)
	77 mg/m <sup>3</sup>	(Worker)
DNEL Long-term - local	174 mg/m <sup>3</sup>	(Consumer)
	221 mg/m <sup>3</sup>	(Worker)

**67-63-0 propan-2-ol**

Oral DNEL Long term systemic	26 mg/kg bw/ day	(Consumers)
Skin DNEL Long term systemic	319 mg/kg bw/day	(Consumer)
	888 mg/kg bw/day	(Worker)
Inhalation DNEL Long-term systemic	89 mg/m <sup>3</sup>	(Consumer)
	500 mg/m <sup>3</sup>	(Worker)

**1330-20-7 xylene\***

Oral DNEL Long term-systemic	12.5 mg/kg bw/ day	(Consumer)
Skin DNEL Long term-systemic	125 mg/kg bw/day	(Consumer)
	212 mg/kg bw/day	(Worker)
Inhalation DNEL Acute-systemic	260 mg/m <sup>3</sup>	(Consumer)
	442 mg/m <sup>3</sup>	(Worker)
DNEL Acute-local	260 mg/m <sup>3</sup>	(Consumer)
	442 mg/m <sup>3</sup>	(Worker)
DNEL Long term-systemic	65.3 mg/m <sup>3</sup>	(Consumer)
	221 mg/m <sup>3</sup>	(Worker)
DNEL Long-term - local	65.3 mg/m <sup>3</sup>	(Consumer)
	221 mg/m <sup>3</sup>	(Worker)

**PNEC values\*:**

**7440-66-6 zinc powder -zinc dust (stabilized)**

PNEC Fresh water	20.6 mg/l	(not specified)
PNEC Sea water	6.1 mg/l	(not specified)
PNEC Fresh water sediment	118 mg/l	(dry mass) (not specified)
PNEC Soil	56.6 mg/kg	(not specified)
PNEC Sewage treatment plant	52 mg/l	(not specified)
PNEC Fresh water sediment	56.5 mg/l	(dry mass) (not specified)

**67-64-1 Acetone**

PNEC Sea water	1.06 mg/l	(not specified)
PNEC Fresh water sediment	30.4 mg/l	(dry mass) (not specified)
PNEC Soil	29.5 mg/kg	(not specified)
PNEC Fresh water sediment	3.04 mg/l	(dry mass) (not specified)

**Reaction mass of ethylbenzene and xylene**

PNEC Fresh water	0.327 mg/l	(not specified)
PNEC Sea water	0.327 mg/l	(not specified)
PNEC Fresh water sediment	12.46 mg/l	(dry mass) (not specified)
PNEC Soil	2.31 mg/kg	(not specified)
PNEC Sewage treatment plant	6.58 mg/l	(not specified)
PNEC Fresh water sediment	12.46 mg/l	(dry mass) (not specified)

**Regulatory information\*:**

**Additional exposure limits with possible technological hazards:**

**100-41-4 Ethylbenzene**

MPIC: 400 mg/m<sup>3</sup>  
MPC: 200 mg/m<sup>3</sup>  
Skin

**108-88-3 Toluene**

MPIC: 200 mg/m<sup>3</sup>

MPC: 100 mg/m<sup>3</sup>

Skin

**Additional information:**

The currently valid lists were used as basis.

**8.2. Exposure control**

**Technical control measures:**

No further data; see section 7.

**Individual protection measures, such as personal protective 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. 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.

Filter A2/P2.

**Hands protection:**

Use protective gloves to work with chemicals according to standard EN 374.



Protective gloves.

Solvent resistant gloves.

Selection of the glove material on consideration of the breakthrough times, rates of diffusion and degradation.

**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 of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to application.

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 min. with the preference given to a breakthrough time greater than 480 min. For short-term or splash guard we recommend the same. We are aware that suitable gloves that offer this level of protection may not be available. In that case, a shorter breakthrough time are acceptable as long as the procedures governing maintenance and timely replacement are followed. The thickness of the gloves is not a good measure of the resistance of the gloves against a chemical substance, because this depends on the exact composition of the material from which the gloves are made.

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye/face protection:**

Safety glasses

Tightly sealed goggles.

**Body protection:**

Use protective suit (EN-13034/ 6)

Full skin covering antistatic, chemical and oil resistant clothing and safety shoes (EN1149; EN340&EN ISO 13688; EN13034-6) are recommended.

**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:**

Physical state

Aerosol

Colour:

Grey

Odour:

Characteristic

Odour threshold:

Not determined.

Melting point/freezing point:

Undetermined.

Boiling point or initial boiling point

and boiling range:

-24.8 °C (115-10-6 dimethyl ether)

Flammability:

Not applicable.

**Bottom and top explosion limit:**

Bottom: 1 vol. % (128601-23-0 Hydrocarbons,C9,aromatics)

Top: 13 vol. % (67-64-1 Acetone)

Flash point: -42°C \*(115-10-6 dimethyl ether)

Auto ignition point: 465°C

Breakdown point: Not determined.

pH: The mixture is non-polar / aprotic

Viscosity:

Kinematic viscosity: Not determined.

Dynamic: Not determined.

**ZINC SPRAY**

Solubility:  
Water: fully miscible\*  
n-octanol/water partition coefficient (Log Pow value): Not determined.  
Vapour pressure at 20 °C: 5000 hPa

Density and/or relative density:  
Density at 20°C: 1.04 g/cm<sup>3</sup>\*  
Relative density: Not determined.  
Vapour density: Not determined.

**9.2. Other information**

Appearance:  
Form: Aerosol

Important information on protection of health and environment, and on safety:  
Auto ignition point: Product is not self-igniting.  
Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Solvent content:  
Organic solvents: 64.5 %  
Solids content: 34.2 %

Change of state:  
Evaporation rate: Not applicable.

Information on the 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.  
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 if 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:**

Based on available data, the classification criteria are not met.

**ATE (Estimated acute toxicity)\*:**

Skin ATE >14706 mg/kg  
Inhalation ATE >147 mg/l

**67-64-1 acetone\***

Oral ATE 5800 mg/kg (Rat)

**ZINC SPRAY**

Dermal	ATE	20000 mg/kg	(nd)
		> 15800 mg/kg	(Rabbit)
Inhalation	ATE	76 mg/l	(Rat)

**LD/LC50 values relevant for classification\*:**

**7440-66-6 zinc powder -zinc dust (stabilized)**

Oral	LD50	> 2000 mg/kg	(Rat)
Inhalation	LC50(4h)	>5.4 mg/l	(Rat)

**67-64-1 Acetone**

Oral	LD50	5800 mg/kg	(Rat) (Acute oral toxicity)
Dermal	LD50	7800 mg/kg	(Rabbit)
Inhalation	LC50(4h)	>20 mg/l	(Rat)

**128601-23-0 Hydrocarbons,C9,aromatics**

Oral	LD50	3492 mg/kg	(Rat)
Dermal	LD50	> 3160 mg/kg	(Rabbit)
Inhalation	LC50(4h)	>6193 mg/l	(Rat) (Acute Inhalation Toxicity)

**Reaction mass of ethylbenzene and xylene**

Oral	LD50	3523 mg/kg	(Rat)
Dermal	LD50	12126 mg/kg	(Rabbit)
Inhalation	LC50(4h)	27 124 mg/l	(Rat)

**67-63-0 propan-2-ol**

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

**1330-20-7 xylene\***

Oral	LD50	4300 mg/kg/bw	(Rat) (Acute Oral Toxicity)
Dermal	LD50	12126 mg/kg/bw	(Rabbit)
Inhalation	LC50(4h)	6350 mg/l	(Rat)

**Skin corrosion/irritation:** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation:** Causes eye irritation. \*

**Allergic effect on airways or skin:** Based on available data, the classification criteria are not met.

**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 drowsiness or dizziness.

**STOT- repeated exposure:** Based on available data, the classification criteria are not met.

**Aspiration hazard:** Based on available data, the classification criteria are not met.

**11.2. Information on other hazards**

Endocrine disrupting properties: None of the components is listed.

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

**Aquatic toxicity\*:**

**7440-66-6 zinc powder -zinc dust (stabilized)**

EC50	354 ug/l (dap)
NOEC (21 days)	178 ug/l (Crustaceen-Palaemon elegans)
NOEC (72h)	9 mg/l (Ceratophyllum demersum)
	0.017 mg/l (Pseudokirchneriella subcapitata)
NOEC (72h)	72.9 ug/l (Pseudokirchneriella subcapitata)
NOEC (28 days)	8.3 ug/l (Cyprinus carpio)
EC10 (21 days)	59.2 ug/l (Daphnia Magna)
EC10 (72h )	27.3 ug/l (Algae)
EC50 (72h)	0.17 mg/l (Selenastrum Capricornutum)
LC50 (96h)	0.41 mg/l (Oncorhynchus mykiss)
EC50 (48h)	1 mg/l (Daphnia magna)
EC50 (96h)	0.527 mg/l (algae)
LC50	238-269 ug/l (fi2)

**67-64-1 Acetone**

EC50	8800 mg/l (Daphnia magna)
	8300 mg/l (Fish)

**128601-23-0 Hydrocarbons,C9,aromatics**

NOELR (72h)	1 mg/l (Pseudokirchneriella subcapitata)
EL50 (48h)	3.2 mg/l (Daphnia magna)
LL50 (96h)	9.2 mg/l (Oncorhynchus mykiss)

**Reaction mass of ethylbenzene and xylene**

NOEC	1.3 mg/l (fish)
NOEC (7days)	0.96 mg/l (Daphnia magna)
NOEC (72h)	0.44 mg/l (algae)
NOEC (28 days)	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**

LOEC (8 days)	1000 mg/l (algae)
LC50 (96h)	9640 mg/l (Pimephales promelas)
LC50 (24h)	9714 mg/l (Daphnia magna)



**1330-20-7 xylene\***  
LC50 (96h) 8.9-16.4 mg/l (Pimephales promelas)  
EC50 (48h) 3.2-9.5 mg/l (Daphnia magna)

**12.2. Persistence and degradability**  
It is 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**  
**Warning:** Very toxic for fish.

**Further ecological information:**  
**General information:**  
Water hazard class 2 (Self-assessment): hazardous to water. \*  
Do not allow the product to reach ground water, watercourses or sewage system.  
Dangerous to drinking water if even small quantities leak into the ground.\*  
Also poisonous for fish and plankton in water bodies.  
Very toxic for aquatic organisms.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1. Waste treatment methods**

**Recommendation:**  
Must not be disposed together with household garbage.  
Do not allow product to reach sewage system.

European waste catalogue:	
HP3	Flammable
HP4	Irritating- causing skin irritation and eye damage.
HP14	Ecotoxic.

**Uncleaned packaging\*:**  
**Recommendation:** Dispose of according to applicable regulations.  
**Recommended cleaning agent:** Water, if necessary with the addition of cleaning agents.

**SECTION 14: TRANSPORT INFORMATION**

**14.1. UN number or ID number\***  
**ADR, ADN, IMDG, IATA** UN1950

<b>14.2. Proper shipping name</b>	
<b>ADR, ADN</b>	UN1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS*
<b>IMDG</b>	AEROSOLS, MARINE POLLUTANT *
<b>IATA</b>	AEROSOLS, flammable

**14.3. Class/ Classification code**

**ADR:**  
**Class:** 2 5F Gases  
**Label** 2.1



**ADN**  
**Class ADN/R:** 2 5F

**IMDG:**  
**Class** 2.1 gases  
**Label** 2.1





**IATA:**  
**Class** 2.1 gases  
**Label** 2.1



#### 14.4. Packaging group

None.

#### 14.5. Environmental hazards

The product contains substances hazardous to the environment:  
Hydrocarbons, C9, aromatics

#### Marine pollutants:

Yes  
Symbol (fish and tree)  
Symbol (fish and tree)

#### Special labelling (ADR):

#### 14.6. Special precautions for users

Warning: gases.

#### Hazard identification number (Kemler code):

-

#### 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.  
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.

#### Segregation Code:

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

Not applicable.

#### 14.7 Maritime transport in bulk according to IMO

Not applicable.

#### Transport/Additional information:

##### ADR

#### Excepted quantities (EQ)

Code: E0  
Not permitted as Excepted Quantity  
D

#### Tunnel restriction code

##### IMDG

#### Limited quantities (LQ) 1L

#### Excepted quantities (EQ)

Code: E0  
Not permitted as Excepted Quantity  
UN 1950 AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

#### UN "Model Regulation":

### SECTION 15: REGULATORY INFORMATION

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

##### Directive 2012/18/EU

Indicated dangerous components- ANNEX I: None of the components are listed.

##### Directive 2012/18/EU

Named dangerous substances - ANNEX I: None of the components are listed.

##### Seveso category:

E1 Hazardous to the aquatic environment\*

P3a FLAMMABLE AEROSOLS

Qualifying quantity (tonnes) for the application of lower-tier requirements: 100 t

Qualifying quantity (tonnes) for the application of upper-tier requirements: 200 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 value for the purpose of licensing under Article 5(3)): None of the components are listed.

#### Annex II - REPORTABLE EXPLOSIVES PRECURSORS:

67-64-1 Acetone

**Regulation (EC) No 273/2004 on drug precursors:**

67-64-1 Acetone  
108-88-3 Toluene\*

**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  
108-88-3 Toluene\*

**Other regulations:**

**Breakdown regulations:**

Class	share %
NK	50-< 75
VOC-CH	64,42 %*
VOC-EU	670,0 g/l*
Danish MAL	Code 5-3

**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.

**Relative 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.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes 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 life. *
H410	Very toxic to aquatic life with long-lasting effects. *
H411	Toxic to aquatic life with long-lasting effects.
H412	Harmful to aquatic life with long-lasting effects. *
EUH066	Repeated exposure may cause skin dryness or cracking.

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

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**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:**

RID:	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail).
ICAO:	International Civil Aviation Organisation.
ADR:	Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road).
IMDG:	International Code for dangerous goods.
IATA:	International Air Transport Association.
GHS:	Globally Harmonized System of classification and labelling of chemicals.
EINECS:	European Inventory chemicals 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 Arbejdshygienisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark).
DNEL:	Derived No-Effect Level (REACH).
PNEC:	Predicted no-effect concentration - (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 1A:	Flammable gases- Category 1A.
Aerosol 1:	Aerosols - Category 1.
Press. Gas (Liq):	Gases under pressure - Liquefied 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 Irrit. 2:	Serious eye damage/eye irritation - Category 2.
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.
Aquatic Acute 1:	Hazardous to the aquatic environment - acute hazard - Category 1:

Aquatic Chronic 1; Hazardous to the aquatic environment- chronic hazard - category 1.  
Aquatic Chronic 2; Hazardous to the aquatic environment- chronic hazard - category 2.

**Changes in the Sheet:**

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

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.

15: added subsections 15.1.1, 15.1.2.

Changes in the content of sections:

1.1, 3.2, 6.1, 6.2, 6.3, 8.1, 9.1, 11.1, 12.1, 12.7, 13.1, 14.2, 14.7, 15.1, 16.

General update.

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