

# SAFETY DATA SHEET

[In accordance with the criteria of Regulation No 1907/2006 (REACH) as amended]

Date of update: 14.07.2022

Version: 4.0/LT

# INRAL

**Trade name: INRAL ZINC GROUND**

## Section 1: Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifier

**Trade name:** INRAL ZINC GROUND

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

**Relevant identified uses:** anticorrosive protection of steel and cast iron elements.

**Uses advised against:** not determined.

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

**Manufacturer/Supplier:**

UAB TEGRA STATE

Savanoriu ave.178A, LT-03154 Vilnius, LITHUANIA

Tel.: +37052661167

www.tegrastate.eu

E-mail: info@tegragroup.eu

**Further information obtainable from:** Product safety department

### 1.4 Emergency telephone number:

112

National Poisons Information Service, Birmingham

Tel.: 844 892 0111

Lithuania Poisons Control and Information Bureau, Vilnius

Tel.: +370 5 236 20 52 / +370 687 533 78

## Section 2: Hazards identification

### 2.1 Classification of the substance or mixture

Aerosol 1 H222-H229, Asp. Tox. 1 H304\*, Skin Irrit. 2 H315, Eye Irrit. 2 H319, STOT SE 3 H336, STOT RE 2 H373, Aquatic Chronic 2 H411

Extremely flammable aerosol. Pressurised container: May burst if heated. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.

\*product does not require labelling in terms of this hazard if it is placed on the market in aerosol containers.

### 2.2 Label elements

**Hazard pictograms and signal words**



**Names of dangerous components placed on the label**

**Contains:** acetone, xylene – mixture of isomers, ethyl acetate, n-butyl acetate.

**Hazard statements**

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

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H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H373 May cause damage to organs: kidney, liver, central nervous system through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

## Precautionary statements

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.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

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

P501 Dispose of contents/container to special waste collection point.

## 2.3 Other hazards

Product does not contain ingredients, which meet criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation. The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 % by weight.

## Section 3: Composition/information on ingredients

### 3.1 Substances

Not applicable.

### 3.2 Mixtures

#### hydrocarbons, C<sub>3-4</sub>, petroleum gas\*

Concentration range: 22-36 %

CAS number: 68476-40-4

EC number: 270-681-9

Index number: 649-199-00-1

Registration number: 01-2119486557-22-XXXX

Classification: Flam. Gas 1 H220, Press. Gas H280

\*The classification as a carcinogen cat. 1A or mutagen cat. 1B need not apply, because substance contains less than 0,1 % 1,3-butadiene [EINECS 203-450-8] (Note K).

#### acetone

Concentration range: 15-30 %

CAS number: 67-64-1

EC number: 200-662-2

Index number: 606-001-00-8

Registration number: 01-2119471330-49-XXXX

Classification: Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336

EUH066 – additional phrase code indicating hazard type

Substance with Community level exposure limit in the workplace.

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## **zinc powder - zinc dust (stabilised)**

Concentration range: 20-24 %  
CAS number: 7440-66-6  
EC number: 231-175-3  
Index number: 030-001-00-9  
Registration number: 01-2119467174-37-XXXX  
Classification: Aquatic Acute 1 H400 (M=1), Aquatic Chronic 1 H410 (M=1)

## **xylene – mixture of isomers**

Concentration range: 7-11 %  
CAS number: 1330-20-7  
EC number: 215-535-7  
Index number: 601-022-00-9  
Registration number: 01-2119488216-32-XXXX  
Classification: Flam. Liq. 3 H226, Asp. Tox. 1 H304, Acute Tox. 4 H312, Skin Irrit. 2 H315, Eye Irrit. 2 H319, Acute Tox. 4 H332, STOT SE 3 H335, STOT RE 2 H373

Substance with Community level exposure limit in the workplace.

## **ethyl acetate**

Concentration range: 2-10 %  
CAS number: 141-78-6  
EC number: 205-500-4  
Index number: 607-022-00-5  
Registration number: 01-2119475103-46-XXXX  
Classification: Flam. Liq. 2 H225, Eye Irrit. 2 H319, STOT SE 3 H336

EUH066 – additional phrase code indicating hazard type

Substance with Community level exposure limit in the workplace.

## **n-butyl acetate**

Concentration range: 4-8 %  
CAS number: 123-86-4  
EC number: 204-658-1  
Index number: 607-025-00-1  
Registration number: 01-2119485493-29-XXXX  
Classification: Flam. Liq. 3 H226, STOT SE 3 H336

EUH066 – additional phrase code indicating hazard type

## **ethylbenzene**

Concentration range: < 5 %  
CAS number: 100-41-4  
EC number: 202-849-4  
Index number: 601-023-00-4  
Registration number: 01-2119486136-34-XXXX  
Classification: Flam. Liq. 2 H225, Asp. Tox. 1 H304, Acute Tox. 4 H332, STOT RE 2 H373

Substance with Community level exposure limit in the workplace.

Full text of each relevant H phrase is given in section 16 of SDS.

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## Section 4: First aid measures

### 4.1 Description of first aid measures

#### **Skin contact:**

take off contaminated clothes immediately. Wash contaminated skin with plenty of water, then wash out with water and soap. Consult a doctor, if irritation occurs.

#### **Eye contact:**

protect non-irritated eye, remove any contact lenses. Rinse the contaminated eyes thoroughly with water for 15-20 minutes. Avoid strong stream of water – risk of damage of the cornea. Consult an ophthalmologist, if irritation persists.

#### **Ingestion:**

exposure by this route does not typically occur. If swallowed, rinse mouth with water. Do not induce vomiting! Never give anything by mouth to an unconscious person. Consult a doctor – show label.

#### **Inhalation:**

remove the victim to fresh air. Keep warm and calm. Perform artificial respiration or give oxygen if needed. Consult a doctor, if disturbing symptoms occur.

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

**Skin contact:** may cause skin dryness or cracking after repeated exposure, defatting, frostbite by spraying the skin spray at close range.

**Eye contact:** redness, tearing, burning sensation, irritation.

**Ingestion:** may cause irritation of the mucous membranes of gastrointestinal tract, nausea, vomiting. Aspiration hazard if liquid is inhaled into lungs, particularly from vomiting. Aspiration may result in chemical pneumonia.

**Inhalation:** possible irritation of the mucous membranes of respiratory system, cough, drowsiness and dizziness, headaches.

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

Physician makes a decision regarding further medical treatment after thoroughly examination of the injured. Treat symptomatically.

## Section 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media:** alcohol resistant foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water fog.

Small fire put out with the snow extinguisher (CO<sub>2</sub>) or dry powder (ABC or BC), large fire extinguish with alcohol-resistant foam or water fog. Large fire should be extinguished from protected posts.

**Unsuitable extinguishing media:** water jet – risk of propagation of the flame.

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

Under fire conditions product may produce harmful gases consisting of carbon oxides and other unidentified thermal decomposition products. Do not inhale combustion products, may cause health risk.

### 5.3 Advice for firefighters

Extremely flammable aerosol. Personal protection typical in case of fire. Do not stay in the fire zone without self-contained breathing apparatus and protective clothing resistant to chemicals. Pressurized container - danger of leaks, or even an explosion at a high temperature. Gas can accumulate on the surface of the ground and move along distances creating a risk of fire or explosion. In case of fire, cool endangered containers with water spray from a safe distance. Do not allow extinguishing water to enter drains, surface water and groundwater. Collect used extinguishing media.

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## Section 6: Accidental release measures

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

Limit the access for the outsiders into the breakdown area, until the suitable cleaning operations are completed. Ensure that the effects of breakdown are removed only by trained personnel. In case of large spills, isolate the exposed area. Avoid skin and eyes contamination. Do not inhale aerosol. Wear personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition, do not use open flames or sparking tools. Prohibit smoking.

### 6.2 Environmental precautions

In case of release of large amounts of the product, it is necessary to take appropriate steps to prevent it from spreading into the environment. Notify relevant emergency services.

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

Collect damaged container mechanically. Absorb leakage with incombustible liquid-binding material (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to appropriate waste disposal containers. Treat the collected material as waste. Clean contaminated surface. Do not use sparking tools, do not smoke.

### 6.4 Reference to other sections

Appropriate conduct with waste product – section 13. Personal protection equipment – section 8.

## Section 7: Handling and storage

### 7.1 Precautions for safe handling

Handle in accordance with good occupational hygiene and safety practices. Avoid contact with eyes and skin. Wear personal protective equipment. Avoid breathing aerosol. Ensure adequate general and/or local ventilation. Eliminate sources of ignition - do not use open flames, do not smoke, do not use sparking tools and clothing from fabric susceptible to electrification; protect containers from heating. Do not spray on a naked flame or any incandescent material. Protect against electrostatic charges.

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

Store only in a cool, dry place, recommended storage temperature: up to + 35 °C. Keep away from sources of flame. Do not smoke, use open flame and sparking devices in a warehouse. Do not pierce or burn packaging even after use. Keep away from food, foodstuffs and animal feed. Avoid contact with strong oxidizing agents (concentrated nitric acid, hydrogen peroxide, organic peroxides) - contact may cause ignition. Avoid contact with steel corrosive agents (acids, salt solutions) - the risk of damage of the containers and the release of aerosols content.

### 7.3 Specific end use(s)

No information about uses other than mentioned in subsection 1.2.

## Section 8: Exposure controls/personal protection

### 8.1 Control parameters

Specification	Limit values	
	8 hours	short term
acetone [CAS 67-64-1]	1210 mg/m <sup>3</sup>	—
xylene - mixture of isomers [CAS 1330-20-7] <sup>1)</sup>	221 mg/m <sup>3</sup>	442 mg/m <sup>3</sup>

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ethyl methyl ketone [CAS 78-93-3]	734 mg/m <sup>3</sup>	1468 mg/m <sup>3</sup>
ethylbenzene [CAS 100-41-4] <sup>1)</sup>	442 mg/m <sup>3</sup>	884 mg/m <sup>3</sup>

<sup>1)</sup> possibility of significant uptake through the skin.

Legal Basis: Commission Directive 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, 2019/1831/EU.

The table above shows the maximum workplace concentration values at the Community level.

Please check any national occupational exposure limit values in your country.

## Recommended control procedures

Procedures Concerning the control over the dangerous components concentrations in the air and control over the air quality in the workplace - if they are available and Justified for the position - in Accordance with the European Standards, with the conditions within the exposure place and a proper test methodology adapted to the working conditions.

## PNEC values for components

PNEC	acetone	ethyl acetate	n-butyl acetate
fresh water	10,6 mg/l	0,26 mg/l	0,18 mg/m <sup>3</sup>
marine water	1,06 mg/l	0,26 mg/l	0,018 mg/m <sup>3</sup>
intermittent release	21 mg/l	-	0,36 mg/m <sup>3</sup>
fresh water sediment	30,4 mg/kg d.w.	0.981 mg/kg d.w.	1.25 mg/kg d.w.
marine water sediment	3,04 mg/kg d.w.	0.0981 mg/kg d.w.	0.125 mg/kg d.w.
sewage treatment plants	29,5 mg/l	—	650 mg/l
soil	0,112 mg/kg d.w.	0.0903 mg/kg d.w.	0.24 mg/kg d.w.

## DNEL values for components

DNEL	acetone	
	worker	consumer
inhalation, short-term exposure	2420 mg/m <sup>3</sup>	—
inhalation, long-term exposure	1210 mg/m <sup>3</sup>	200 mg/m <sup>3</sup>
skin, long-term exposure	186 mg/kg b.w./day	62 mg/kg b.w./day
oral, long-term exposure	—	62 mg/kg b.w./day

DNEL	xylene - mixture of isomers	
	worker	consumer
inhalation, short-term exposure (local/systemic effects)	289 mg/m <sup>3</sup>	174 mg/m <sup>3</sup>
inhalation, long-term exposure (local/systemic effects)	77 mg/m <sup>3</sup>	14.8 mg/m <sup>3</sup>
skin, long-term exposure (systemic effects)	180 mg/kg b.w./day	108 mg/kg b.w./day
oral, long-term exposure (systemic effects)	—	1.6 mg/kg b.w./day

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DNEL	ethyl acetate	
	worker	consumer
inhalation, short-term exposure (local/systemic effects)	1468 mg/m <sup>3</sup>	734 mg/m <sup>3</sup>
inhalation, long-term exposure (local/systemic effects)	734 mg/m <sup>3</sup>	367 mg/m <sup>3</sup>
skin, long-term exposure (systemic effects)	63 mg/kg b. w./day	37 mg/kg b. w./day
oral, long-term exposure (systemic effects)	—	4.5 mg/kg b. w./day

  

DNEL	n-butyl acetate	
	worker	consumer
inhalation, short-term exposure (local/systemic effects)	960 mg/m <sup>3</sup>	859,7 mg/m <sup>3</sup>
inhalation, long-term exposure (local/systemic effects)	480 mg/m <sup>3</sup>	102,34 mg/m <sup>3</sup>

## 8.2 Exposure controls

### Appropriate engineering controls

Use the product in accordance with good occupational hygiene and safety practices. Do not eat, drink or smoke when using the product. Take off contaminated clothes immediately. Ensure good general and/or local ventilation at work stations to ensure the maintenance of concentrations of hazardous components in the air below the exposure limit values. Before break and after work wash hands carefully. Avoid contact with eyes and skin. If there is a risk of inflammation of the clothing on worker, emergency showers for washing entire body and separate eyewash stations should be installed no more than 20 m in a straight line from the working area where these processes are performed.

### Individual protection measures, such as personal protective equipment

The necessity to use and selection of appropriate personal protective equipment should take into account the type of risk posed by the product, working conditions and the way of handling the product. The personal protective equipment used must meet the requirements of Regulation (EU) 2016/425 and the relevant standards. The employer is obliged to provide protection measures appropriate to the activities performed and meeting all quality requirements, including their maintenance and cleaning. Any contaminated or damaged PPE must be replaced immediately.

### Hand protection

Use gloves resistant to the product (e.g. made from butyl rubber, EN 374). In case of short term contact use protective gloves with effectiveness level 2 or higher (permeation time > 30 minutes). In case of long term contact use protective gloves with effectiveness level 6 (permeation time > 480 minutes). Using protective cream on exposed parts of the body is recommended.

When using protective gloves during work with chemical products, it should be noted that the efficacy levels and corresponding breakthrough times do not indicate actual times of protection at a particular workplace, because the protection can be affected by many factors, e.g. temperature, other substances etc. If there are any signs of degradation, damage or change in appearance (colour, flexibility, shape), it is recommended to replace the gloves with a new pair. Please follow the manufacturer's instructions, not only in terms of gloves' usage, but also in terms of their cleaning, maintenance and storage. It is also important to know how to take off the gloves in order to avoid hands contamination.

### Body protection

Antistatic protective clothing made of dense fabric (preferably from natural fibers, such as cotton).

Safety boots.

### Eye protection

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Safety glasses in a sealed enclosure with side protection (plastic casing resistant to organic solvents, EN 166).

## Respiratory protection

Under normal conditions of use is not required. In case of insufficient ventilation, wear an approved respirator with a filter of AX type. Use breathing apparatus with independent air supply in case of: working in a confined space, insufficient amount of oxygen in the air, a large uncontrolled emissions or other circumstances when the mask with the filter does not give a sufficient protection.

## Thermal hazards

Do not occur.

## Environmental exposure controls

Avoid environment contamination, do not empty into drains. Possible emissions from the ventilation systems and processing equipment should be controlled in order to determinate their compatibility with environmental protection regulations.

## Section 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

<b>Physical state:</b>	liquid in aerosol container
<b>Colour:</b>	according to specification
<b>Odour:</b>	characteristic
<b>Melting point/freezing point:</b>	not applicable
<b>Boiling point or initial boiling point and boiling range:</b>	-42 to 142 °C (propane)
<b>Flammability:</b>	extremely flammable aerosol
<b>Lower and upper explosion limit:</b>	9.6/1.9 % vol. (for propellant)
<b>Flash point:</b>	-105 °C (propane)
<b>Auto-ignition temperature:</b>	> 287 °C
<b>Decomposition temperature:</b>	not determined
<b>pH:</b>	not determined
<b>Kinematic viscosity:</b>	not applicable
<b>Solubility:</b>	0.012 kg/dm <sup>3</sup>
<b>Partition coefficient n-octanol/water (log value):</b>	not determined
<b>Vapour pressure:</b>	> 0.1 MPa (-15 °C), < 2.55 MPa (70 °C) – for propellant
<b>Density and/or relative density:</b>	app. 0,68 kg/dm <sup>3</sup>
<b>Relative vapour density:</b>	> 1 (air=1, 20 °C)
<b>Particle characteristics:</b>	not applicable

### 9.2 Other information

No additional data.

## Section 10: Stability and reactivity

### 10.1 Reactivity

Product is reactive. Product vapours can create explosive mixtures with air. See also subsections 10.3 – 10.5.

### 10.2 Chemical stability

The product is stable under normal conditions of handling and storage.

### 10.3 Possibility of hazardous reactions

Hazardous reactions are not known.



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## 10.4 Conditions to avoid

Avoid sources of heat and direct sunlight, temperature above 50 °C.

## 10.5 Incompatible materials

Avoid contact with strong oxidizers.

## 10.6 Hazardous decomposition products

Not known.

## Section 11: Toxicological information

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

#### Toxicity of ingredients

##### acetone

LD<sub>50</sub> (oral) 5800 mg/kg (experimental value)

LD<sub>50</sub> (skin, rat) 7400 mg/kg (experimental value)

##### xylene – mixture of isomers

LD<sub>50</sub> (oral, rat) 5000 mg/kg

LD<sub>50</sub> (skin, rabbit) 1700 mg/kg

LC<sub>50</sub> (inhalation, rat) 4550 ppm/4h

##### ethyl acetate

LD<sub>50</sub> (oral, rat) 4934 mg/kg (experimental value)

LD<sub>50</sub> (skin, rabbit male) > 20000 mg/kg (experimental value)

LC<sub>50</sub> (inhalation, rat) > 22.5 mg/l/6h (experimental value)

##### n-butyl acetate

LD<sub>50</sub> (skin, rabbit) 14000 mg/kg

LC<sub>50</sub> (inhalation, rat) 9660 mg/m<sup>3</sup>/8h

#### Toxicity of mixture

##### Acute toxicity

ATEmix (skin)\* > 2000 mg/kg

ATEmix (inhalation, mist)\* 2,72 mg/l

\* The acute toxicity estimate (ATEmix) was determined using the appropriate conversion value from Table 3.1.2 in Annex I to CLP as amended.

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

##### Skin corrosion/irritation

Causes skin irritation.

##### Serious eye damage/irritation

Causes serious eye irritation.

##### Respiratory or skin sensitisation

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

##### Germ cell mutagenicity

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

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## **Carcinogenicity**

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

## **Reproductive toxicity**

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

## **STOT - single exposure**

May cause drowsiness or dizziness.

## **STOT - repeated exposure**

May cause damage to organs: kidney, liver, central nervous system through prolonged or repeated exposure.

## **Aspiration hazard**

Product contains components with low viscosity which are classified as hazardous after aspiration caused by ingestion. However, because of product form which prevents accidental ingestion, the whole product does not pose aspirational hazard.

## **Other information**

Repeated exposure may cause skin dryness or cracking.

## **Information on likely routes of exposure**

Routes of exposure: skin contact, eye contact, inhalation. See subsection 4.2 for more information on the effects from each possible route of exposure.

## **Symptoms related to the physical, chemical and toxicological characteristics**

See subsection 4.2.

## **Delayed and immediate effects as well as chronic effects from short and long-term exposure**

See subsection 4.2.

## **11.2 Information on other hazards**

### **Endocrine disrupting properties**

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 % by weight.

### **Other information**

No data.

## **Section 15: Regulatory information**

### **12.1 Toxicity**

#### **Toxicity of ingredients**

##### **hydrocarbons, C3-4, petroleum gas**

Acute toxicity for fish	LC <sub>50</sub> > 24.11 mg/l/96h (Oncorhynchus mykiss)
Acute toxicity for daphnia	EC <sub>50</sub> > 14.22 mg/l/48h (Daphnia magna)
Acute toxicity for algae	EC <sub>50</sub> > 7.71 mg/l/72h (Pseudokirchneriella subcapitata)

##### **acetone**

Acute toxicity for fish	LC <sub>50</sub> 5540 mg/l/96h (Oncorhynchus mykiss)
	LC <sub>50</sub> 11000 mg/l/96h (Alburnus alburnus)
Acute toxicity for daphnia	EC <sub>50</sub> 8800 mg/l/48h (Daphnia pulex)
	EC <sub>50</sub> 2100 mg/l/24h (Artemisia salina)
Acute toxicity for algae	NOEC 530 mg/l/8h (Microcystis aeruginosa)
	NOEC 430 mg/l/96h (Prorocentrum minimum)
Acute toxicity for bacteria	EC <sub>12</sub> 1000 mg/l/30 min. (activated sludge)

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## **zinc powder - zinc dust (stabilised)**

Acute toxicity for fish LC<sub>50</sub> 0.44 mg/l/96h (Cottus bairdii)  
Acute toxicity for daphnia EC<sub>50</sub> 1.83 mg/l/48h (Daphnia magna)

## **xylene – mixture of isomers**

Acute toxicity for daphnia EC<sub>50</sub> 7.4 mg/l/48h (Daphnia magna)

## **ethyl acetate**

Acute toxicity for fish LC<sub>50</sub> 230 mg/l/96h (Pimephales promelas)  
Acute toxicity for daphnia EC<sub>50</sub> 165 mg/l/48h (Daphnia magna)  
Acute toxicity for algae EC<sub>50</sub> > 900 mg/l/72h (Scenedesmus pannonicus)  
Chronic toxicity for daphnia NOEC 2.4 mg/l/21d (Daphnia magna)

## **n-butyl acetate**

Acute toxicity for fish LC<sub>50</sub> 62 mg/l/48h (Leuciscus iduslas)  
LC<sub>50</sub> 18 mg/l/96h (Pimephales promelas)  
Acute toxicity for daphnia EC<sub>50</sub> 44 mg/l/48h (Daphnia magna)  
Acute toxicity for algae IC<sub>50</sub> 675 mg/l/72h (Scenedesmus subspicatus)

## **Toxicity of mixture**

Product is not classified as hazardous for the environment.

## **12.2 Persistence and degradability**

No data for mixture.

## **12.3 Bioaccumulative potential**

Data for ingredients  
n-butyl acetate: BCF = 3.1

## **12.4 Mobility in soil**

Product is mobile in water environment and soil. Gaseous components quickly spread in atmosphere. Mobility of components of the mixture in soil depends on the hydrophilic and hydrophobic properties and biotic and abiotic conditions of soil, including its structure, climatic conditions, seasons and soil organisms (mostly: bacteria, fungus, algae, invertebrates).

## **12.5 Results of PBT and vPvB assessment**

Substances contained in the product are not assessed as PBT and vPvB.

## **12.6 Endocrine disrupting properties**

The product does not contain substances included in the list established in accordance with Article 59(1) for having endocrine disrupting properties, or substances identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 (3) or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0.1 % by weight.

## **12.7 Other adverse effects**

The mixture is not classified as hazardous to the ozone layer. Consider other harmful effects of individual components of the mixture on the environment (eg. global warming potential).

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## Section 13: Disposal considerations

### 13.1 Waste treatment methods

**Disposal methods for the product:** not empty into drains. Disposal in accordance with the local legislation. Do not remove the remains from the original packaging. Recommended waste code: 16 03 05\* Organic wastes containing dangerous substances. Waste code should be given in the place of its formation.

**Disposal methods for used packing:** classification of the waste meets the requirements for hazardous waste. Deliver the packaging to an authorized company. Do not mix with other waste materials. Do not burn and do not pierce the empty package.

Legal basis: Directive 2008/98/EC as amended, 94/62/EC as amended.

## Section 14: Transport information

### 14.1 UN number or ID number

UN 1950

### 14.2 UN proper shipping name

AEROSOLS, flammable

### 14.3 Transport hazard class(es)

2 (label 2.1)

### 14.4 Packing group

Not applicable. Limited quantities 1 I.

### 14.5 Environmental hazards

Mixture is not hazardous for the environment according to the criteria of transport regulations.

### 14.6 Special precautions for user

Avoid sources of ignition and flame. Packages should not be thrown or subjected to impact. Receptacles shall be so placed on the vehicle or container that they cannot tip over or fall.

EMS: F-D, S-U (IMDG code for shipping).

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

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 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC as amended.

**Commission Regulation (EU) No 2020/878** of 18 June 2020 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

**Regulation (EC) No 1272/2008** of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC,

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and amending Regulation (EC) No 1907/2006 (Text with EEA relevance) as amended.

**Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives as amended.**

**European Parliament and Council Directive 94/62/EC of 20 December 1994 on packaging and packaging waste as amended.**

**Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC (Text with EEA relevance).**

**Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.**

**Commission Directive 2006/15/EC of 7 February 2006 establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC.**

**Commission Directive 2009/161/EU of 17 December 2009 establishing a third list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.**

**Commission Directive 2017/164/EU of 31 January 2017 establishing a fourth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC, and amending Commission Directives 91/322/EEC, 2000/39/EC and 2009/161/EU.**

**Commission Directive 2019/1831/EU of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC.**

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

**IMDG Code International Maritime Dangerous Goods Code.**

**IATA Dangerous Goods Regulations.**

## 15.2 Chemical safety assessment

It is not necessary to carry out a chemical safety assessment for the mixture.

## Section 16: Other information

### Full text of indicated H phrases mentioned in section 3

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 serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

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

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

EUH066 Repeated exposure may cause skin dryness or cracking.

### Abbreviations and acronyms

Acute Tox. 4 Acute toxicity category 4

Aquatic Acute 1 Toxicity for aquatic organisms – acute toxicity category 1

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Aquatic Chronic 1, 2 Toxicity for aquatic organisms – chronic toxicity category 1, 2  
Asp Tox. 1 Aspiration hazard category 1  
Eye Irrit. 2 Eye irritation category 2  
Flam. Gas 1 Flammable gas category 1  
Flam. Liq. 2, 3 Flammable liquid category 2, 3  
Press. Gas Gas under pressure  
Skin Irrit. 2 Skin irritation category 2  
STOT RE 2 Specific target organ toxicity — repeated exposure category 2  
STOT SE 3 Specific target organ toxicity — single exposure category 3  
PBT Persistent, Bioaccumulative and Toxic substance  
vPvB very Persistent, very Bioaccumulative substance  
DNEL Derived No Effect Level.  
PNEC Predicted No Effect Concentration  
NOEC No Observed Effect Concentration

## Trainings

Before commencing working with the product, the user should learn the Health & Safety regulations, regarding handling chemicals, and in particular, undergo a proper workplace training. Persons related to the transportation of the dangerous goods in compliance with the ADR Agreement should be properly trained within the scope of performed tasks (general training, on-the-job training and training related to the safety issues).

## Key literature references and data sources

This SDS was prepared on the basis of sheets of the individual components delivered by the manufacturer, literature data, online databases as well as our knowledge and experience, taking into account current legislation.

## Methods of evaluating information which was used for the purpose of classification of the mixture according to Regulation 1272/2008/EC (CLP) as amended

Aerosol 1 H222-H229	based on test results
Asp. Tox. 1 H304	calculation method
Skin Irrit. 2 H315	calculation method
Eye Irrit. 2 H319	calculation method
STOT SE 3 H336	calculation method
STOT RE 2 H373	calculation method
Aquatic Chronic 2 H411	calculation method

## Other data

**Data of update:** 14.07.2022

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**Changes:** Sections 1-16

The information above is based on a current available data concerning the product, but also on the experience and knowledge in this field of the producer. They are neither a quality description of the product nor a guarantee of particular features. They are to be treated as aid to safety in transport, storage and usage of the product. That does not free the user from the responsibility of improper usage of the information above and also of improper compliance with the law norms in the field.