

Safety data sheet
according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Trade name: JUBIN METAL PRIMER**

· **Article number: 2.000.251**

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

· **Life cycle stages**

PW Widespread use by professional workers

C Consumer use

· **Sector of Use**

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SU19 Building and construction work

· **Process category PROC10** Roller application or brushing

· **Environmental release category ERC10a** Widespread use of articles with low release (outdoor)

· **Application of the substance / the mixture** Metal working

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

JUB d.o.o.

Dol pri Ljubljani 28

1262 DOL PRI LJUBLJANI

SLOVENIA

T: + 386 1 5884 183

F: + 386 1 5884 250

E: info@jub.si

· **Further information obtainable from:**

Laura Učakar

T: +386 1 5884 185

F: +386 1 5884 227

E: laura.ucakar@jub.eu

· **1.4 Emergency telephone number:**

UK Emergency number: 999

Emergency Action: In the event of a medical enquiry involving this product, please contact your doctor or local hospital accident and emergency department.

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 1)

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

· 2.2 Label elements

· Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS07 GHS09

· Signal word Warning

· Hazard-determining components of labelling:

trizinc bis(orthophosphate)

4-oxo-4-(p-tolyl)butyric acid adduct with 4-ethylmorpholine

zinc oxide

· Hazard statements

H319 Causes serious eye irritation.

H411 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.

P103 Read carefully and follow all instructions.

P264 Wash thoroughly after handling.

P273 Avoid release to the environment.

P280 Wear eye protection / face protection.

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

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

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

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 2)

Additional information:

EUH208 Contains reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1), 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards

• **Results of PBT and vPvB assessment** Not applicable.

• **PBT:** Not applicable.

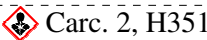
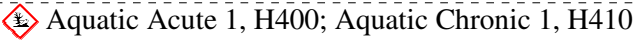
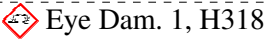
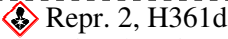
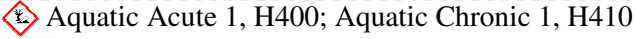
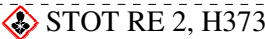

• **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

• **Description:** Mixture of substances listed below with nonhazardous additions.

Dangerous components:

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

CAS: 13463-67-7 EINECS: 236-675-5 Reg.nr.: 01-2119489379-17	titanium dioxide ----- 	10-25%
CAS: 7779-90-0 EINECS: 231-944-3	trizinc bis(orthophosphate) ----- 	1-5%
CAS: 171054-89-0 ELINCS: 419-240-6 Reg.nr.: 01-2119489379-17	4-oxo-4-(p-tolyl)butyric acid adduct with 4-ethylmorpholine ----- 	1-5%
CAS: 6846-50-0 Reg.nr.: 01-2119451093-47	2,2,4-trimethyl-1,3-pentanediol diisobutyrate -----  Aquatic Chronic 3, H412	1-5%
CAS: 1314-13-2 EINECS: 215-222-5 Reg.nr.: 2119463881-32	zinc oxide ----- 	0-5%
CAS: 34590-94-8 EINECS: 252-104-2 Reg.nr.: 01-2119450011-60	Dipropylene glycol monomethyl ether substance with a Community workplace exposure limit	≤1%
CAS: 546-93-0	Magnesite substance with a Community workplace exposure limit	≤0.5%
CAS: 107-21-1 EINECS: 203-473-3 Reg.nr.: 01-2119456816-28	ethanediol -----  	0-≤0.5%

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31






Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 3)

CAS: 7631-95-0 EINECS: 231-551-7 Reg.nr.: 01-2119489495-21	Sodium molybdate  Acute Tox. 4, H302; Acute Tox. 4, H312	0-≤0.5%
	reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)  Acute Tox. 3, H301; Acute Tox. 2, H310; Acute Tox. 2, H330  Skin Corr. 1C, H314; Eye Dam. 1, H318  Aquatic Acute 1, H400 (M=100); Aquatic Chronic 1, H410 (M=100)  Skin Sens. 1A, H317	≤0.005%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
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 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

· 5.2 Special hazards arising from the substance or mixture

No further relevant information available.

· 5.3 Advice for firefighters

- **Protective equipment:** No special measures required.

· Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

GB

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 4)

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
In case of gas release or seepage into the ground inform responsible authorities.
Inform respective authorities in case of seepage into water course or sewage system.
In case of seepage into the ground inform responsible authorities.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to item 13.
- **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 disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Protect from frost.
Keep container tightly sealed.
- **Storage class:** 12
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 5)

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:	
CAS: 34590-94-8 Dipropylene glycol monomethyl ether	
WEL	Long-term value: 308 mg/m ³ , 50 ppm Sk
CAS: 546-93-0 Magnesite	
WEL	Long-term value: 10* 4** mg/m ³ *inhalable dust **respirable dust
CAS: 107-21-1 ethanediol	
WEL	Short-term value: 104** mg/m ³ , 40** ppm Long-term value: 10* 52** mg/m ³ , 20** ppm Sk *particulate **vapour
CAS: 7631-95-0 Sodium molybdate	
WEL	Short-term value: 10 mg/m ³ Long-term value: 5 mg/m ³ as Mo

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

· 8.2 Exposure controls

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Wash hands before breaks and at the end of work.
Do not eat or drink while working.

· **Respiratory protection:** Suitable respiratory protective device recommended.

· **Protection of hands:**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Protective gloves

Check protective gloves prior to each use for their proper condition.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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

After use of gloves apply skin-cleaning agents and skin cosmetics.

· **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 can not be calculated in advance and has therefore to be checked prior to the application.

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 6)

- **Penetration time of glove material**

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

- **Eye protection:**

Safety glasses
Tightly sealed goggles
Goggles recommended during refilling

- **Body protection:** Use protective suit.

- **Risk management measures**

It is recommended to use high-quality work clothing and protective equipment. Use only outfits that meet the following standards:

- Protective gloves that meet the criteria of BS EN 374.
- Protective goggles must comply with standard BS EN 166.
- Protective mask respirator for fine dust particles and vapors should be in accordance with BS EN 143 (full face masks).

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Fluid
Colour:	Grey
Odour:	Characteristic
Odour threshold:	Not determined.

- **pH-value at 20 °C:** 7.8-8.3

- **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	≥100 °C

- **Flash point:** Not applicable.

- **Flammability (solid, gas):** Not applicable.

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.

- **Vapour pressure:** Not determined.

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 7)

· Density at 20 °C:	1.313-1.393 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Solubility in / Miscibility with water:	Fully miscible.
· Viscosity:	
Dynamic at 20 °C:	3,000 mPas
Kinematic:	Not determined.
· Solvent content:	EU VOC (kat. A/d) 130 g/l (2010) <11.0 g/l
· Organic solvents:	>1.0 %
· Water:	10.0 %
· VOC (EC)	0.84 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· LD/LC50 values relevant for classification:

CAS: 13463-67-7 titanium dioxide

Oral	LD50	mg/kg (rat)
Dermal	LD50	mg/kg (rabbit)
Inhalative	LC50/4 h	mg/l (rat)

(Contd. on page 9)

Safety data sheet
according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 8)

CAS: 7779-90-0 trizinc bis(orthophosphate)		
Oral	LD50	>5,000 mg/kg (rat)
CAS: 171054-89-0 4-oxo-4-(p-tolyl)butyric acid adduct with 4-ethylmorpholine		
Oral	LD50	>2,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rat)
CAS: 1314-13-2 zinc oxide		
Oral	LD50	>5,000 mg/kg (rat)
CAS: 34590-94-8 Dipropylene glycol monomethyl ether		
Oral	LD50	5,135 mg/kg (rat)
Dermal	LD50	>19,000 mg/kg (rab)
CAS: 107-21-1 ethanediol		
Oral	LD50	5,840 mg/kg (rat)
Dermal	LD50	9,530 mg/kg (rabbit)
CAS: 7631-95-0 Sodium molybdate		
Oral	LD50	560 mg/kg (rat)
Dermal	LD50	2,000 mg/kg (rat)
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (3:1)		
Oral	LD50	49.6-75 mg/kg (rat)
Dermal	LD50	141 mg/kg (rabbit)
Inhalative	LC50/4 h	0.33 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **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** Based on available data, the classification criteria are not met.
- **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.

GB

(Contd. on page 10)

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 9)

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

CAS: 7779-90-0 trizinc bis(orthophosphate)

LC50	1 mg/l (daphnia)
------	------------------

EC50	0.136 mg/kg (/)
------	-----------------

CAS: 171054-89-0 4-oxo-4-(p-tolyl)butyric acid adduct with 4-ethylmorpholine

LC50/ 96 h	>100 mg/l (/)
------------	---------------

EC50/ 48 h	>100 mg/l (daphnia)
------------	---------------------

CAS: 7631-95-0 Sodium molybdate

EC50	330 mg/kg (/)
------	---------------

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:**

Toxic for fish

Harmful to fish

· **Additional ecological information:**

· **General notes:**

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

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Also poisonous for fish and plankton in water bodies.

Toxic for aquatic organisms

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

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

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.

Hand over to hazardous waste disposers.

(Contd. on page 11)

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 10)

· European waste catalogue

08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances
15 01 02	plastic packaging

- **Recommendation:** Dispose of packaging according to regulations on the disposal of packagings.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN-Number
· ADR, IMDG, IATA

UN3082

· 14.2 UN proper shipping name
· ADR

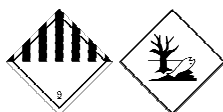
3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trizinc bis(orthophosphate), zinc oxide)

· IMDG

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trizinc bis(orthophosphate), zinc oxide, a mixture of: 5-chloro-2-methyl-2 H -isothiazol-3-one [EC No 247-500-7] and 2-methyl-2 H -isothiazol-3-one [EC No 220-239-6] (3:1)), MARINE POLLUTANT

· IATA

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (trizinc bis(orthophosphate), zinc oxide)

· 14.3 Transport hazard class(es)
· ADR

· Class

9 (M6) Miscellaneous dangerous substances and articles.

· Label

9

· IMDG, IATA

· Class

9 Miscellaneous dangerous substances and articles.

(Contd. on page 12)

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 11)

· Label	9
· 14.4 Packing group · ADR, IMDG, IATA	III
· 14.5 Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category	Warning: Miscellaneous dangerous substances and articles. 90 F-A,S-F A
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	

· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category · Tunnel restriction code	3 -

· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (TRIZINC BIS(ORTHOPHOSPHATE), ZINC OXIDE), 9, III

SECTION 15: Regulatory information

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

Following regulation was considered in the preparation of document:

Legislation on the occupational health and safety, the chemical legislation and regulations on

(Contd. on page 13)

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 12)

biocidal products, regulations on classification, packaging and labeling of chemical and biocidal products and requirements on safety data sheets for chemicals and biocidal products composition, as well as regulations on the management of packaging and packaging waste and waste.

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category E2**
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

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.

· **Relevant phrases**

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H310 Fatal in contact with skin.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H330 Fatal if inhaled.
- H351 Suspected of causing cancer. Route of exposure: Inhalation.
- H361d Suspected of damaging the unborn child.
- 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.
- H412 Harmful to aquatic life with long lasting effects.

· **Recommended restriction of use**

Claims contained in this document are based on our actual knowledge at the time of revision of this document. They do not undertake the properties of the product described in terms of the legal provisions for the pledge.

Placing this document as available does not unbind the product customer from its responsibility to comply with all relevant laws and regulations applicable for this product. This is especially valid in the case of product resale or resale of its mixtures or manufactured products from other areas of law and industrial property rights of third parties. If the product described above is changed by crafting or mixing with other materials, it is not possible to transfer claims from this document onto a newly made product, unless otherwise specified. In the case of product re-packaging the customer must attach the required relevant safety information as well.

(Contd. on page 14)

Safety data sheet

according to 1907/2006/EC, Article 31

Revision: 03.11.2020

Version number 3

Date of the first version: 05.04.2019

Trade name: JUBIN METAL PRIMER

(Contd. of page 13)

· **Department issuing SDS:**

JUB d.o.o.

Product safety department

· **Contact:**

Laura Učakar

laura.ucakar@jub.eu

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity - oral – Category 3

Acute Tox. 4: Acute toxicity - oral – Category 4

Acute Tox. 2: Acute toxicity - dermal – Category 2

Skin Corr. 1C: Skin corrosion/irritation – Category 1C

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Skin Sens. 1A: Skin sensitisation – Category 1A

Carc. 2: Carcinogenicity – Category 2

Repr. 2: Reproductive toxicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**