

The safety data sheet complies with Commission Regulation (EU) 878/2020 of 18 June 2020 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) .

## MEGATUK LD2

Creation date	22nd October 2003	Version	15
Revision date	29th September 2022		

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

**1.1. Product identifier** MEGATUK LD2  
Substance / mixture mixture

**1.2. Relevant identified uses of the substance or mixture and uses advised against**  
**Mixture's intended use**

Plastic lubricant

**The use descriptors**

IS Use at industrial sites  
PW Widespread use by professional workers

**Mixture uses advised against**

The product should not be used in ways other than those referred in Section 1.

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

**Supplier**

Name or trade name	NOVATO
Address	Uralská 770/6, Praha, 160 00 Czech Republic
Identification number (CRN)	62910370
VAT Reg No	CZ62910370
Phone	+420 233 339 688
E-mail	petr.johanides@novato.cz
Web address	www.novato.cz

**Competent person responsible for the safety data sheet**

Name	ABITEC
E-mail	info@abitec.cz

**1.4. Emergency telephone number**

European emergency number: 112

### SECTION 2: Hazards identification

**2.1. Classification of the substance or mixture**

**Classification of the mixture in accordance with Regulation (EC) No 1272/2008**

The mixture is not classified as dangerous according to Regulation (EC) No 1272/2008.

**Most serious adverse physico-chemical effects**

Incomplete thermal decomposition at high temperatures may result in the release of dangerous gases.

**Most serious adverse effects on human health and the environment**

Contains a sensitizing substance in an amount below the limit for classification, may cause an allergic reaction. In rare cases, it may cause mild eye irritation if accidentally rubbed into the eyes. Difficulty breathing, headache, nausea may also occur. Ensure against confusion with food. The mixture is not classified as dangerous for the environment. Avoid release to sewers, soil, and ground or surface water. Follow the instructions for use to avoid risks to people and the environment.

**2.2. Label elements**

none

**Supplemental information**

EUH208 Contains zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate). May produce an allergic reaction.

**2.3. Other hazards**

Neither the mixture nor its components meet the criteria for persistent, bioaccumulative and toxic or highly persistent and highly bioaccumulative substances in accordance with Annex XIII, nor have they been included in the list drawn up in accordance with Article 59, paragraph 1, due to the content of endocrine disruptors, nor has it been determined as a substance with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

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### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

Mixture.

**Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment**

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 4259-15-8 EC: 224-235-5	zinc bis[O,O-bis(2-ethylhexyl)] bis (dithiophosphate)	1-<2,5	Eye Dam. 1, H318 Aquatic Chronic 2, H411 Specific concentration limit: Eye Dam. 1, H318: C ≥ 50 % Aquatic Chronic 2, H411: C ≥ 25 %	

Full text of all classifications and hazard statements is given in the section 16.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

If you feel any health problems or if in doubt, seek medical advice and provide information from this Safety Data Sheet. In the case of life-threatening conditions, resuscitate. Keep the unconscious person in a stabilized position and do not give anything by mouth. Avoid cool. Do not induce vomiting. For spontaneous vomiting, avoid inhalation of vomit.

##### If inhaled

There is no risk of inhalation during normal use. Interrupt exposure, breathe fresh air. Seek medical attention if respiratory tract irritation occurs.

##### If on skin

Wipe off the mixture, wash with lukewarm water, soap and treat with regenerating cream. If clothing is contaminated, remove clothing.

##### If in eyes

If the affected person has contact lenses, remove them. Flush eyes wide open from the inner corner of the eye to the outside with plenty of clean, lukewarm water, especially under the eyelids. Rinse for 10 - 15 minutes, seek medical attention.

##### If swallowed

Leave the affected person alone. Do not induce vomiting, rinse mouth with water (if conscious), drink a glass of water. Seek medical attention and present this safety data sheet. Danger of vomiting!

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

##### If inhaled

not available

##### If on skin

Repeated or prolonged contact with skin may cause skin dryness or cracking.

##### If in eyes

In case of accidental contact with the eyes, it may slightly irritate the eyes (tearing, burning, itching).

##### If swallowed

Ingestion may cause gastrointestinal irritation, abdominal pain and nausea.

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

Immediate medical attention is not required during normal use of the mixture.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

The mixture is not flammable, adapt extinguishing media to the surrounding fire (foam, CO<sub>2</sub>, powder).

##### Unsuitable extinguishing media

Not defined.

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**5.2. Special hazards arising from the substance or mixture**

Thermal decomposition at high temperatures or in case of fire can produce dangerous decomposition products (CO<sub>x</sub>, NO<sub>x</sub>, oxides of sulfur and phosphorus, aliphatic and aromatic pyrolysis products). Do not inhale thermal decomposition products.

**5.3. Advice for firefighters**

Adapt protective equipment to the nature of the fire (self-contained breathing apparatus, emergency suit).

**SECTION 6: Accidental release measures**

**6.1. Personal precautions, protective equipment and emergency procedures**

Prevent unauthorized entry, escape area. Avoid contact with skin and eyes - use personal protective equipment. The location of the leak can be slippery. Pay attention to personal safety.

**6.2. Environmental precautions**

Provide a spill area, prevent leakage into drains, soil, surface and ground water. In case of a large liquid leak, monitor the NPK concentrations resp. TLV and inform the relevant public authorities and the flow or sewerage manager.

**6.3. Methods and material for containment and cleaning up**

Collect the paste mechanically. In the event of a minor leak, wipe the mixture with a cloth, place in a closable waste container, label and dispose of in accordance with local waste disposal regulations.

**6.4. Reference to other sections**

See the Section 7, 8 and 13.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

Follow the recommendations in the operating instructions. Ensure direct contact of the mixture with eyes and skin, use personal protective equipment according to section 8. Secure against confusion with food. The location of the leak can be slippery. Pay attention to personal safety. Observe valid legal regulations on safety and health protection. Follow the principles of hygiene when working with chemicals, do not eat, drink or smoke while working. Wash hands with warm soapy water before breaks, meals and after work. Store in the original container.

**7.2. Conditions for safe storage, including any incompatibilities**

Store in original containers in dry, well-ventilated areas. Store away from heat, protect from direct sunlight, do not smoke. Keep away from food, drink and animal feeding stuffs. Follow the instructions on the label.

Content	Packaging type	Material of package
400 ml	tube	HDPE

Storage class 11 - Other combustible solids

Storage temperature min 0 °C, max 40 °C

**7.3. Specific end use(s)**

The mixture can be used in the temperature range -20 °C to +150 °C, for a short time up to +200 °C.

**SECTION 8: Exposure controls/personal protection**

**8.1. Control parameters**

The mixture does not contain any constituents of national exposure limits specified in Annex 2, Government Decree 361/2007 Coll., As amended or European Union for Work Environment.

**DNEL**

zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	6.6 mg/m <sup>3</sup>	Chronic effects systemic		
Workers	Dermal	9.6 mg/kg/24h	Chronic effects systemic		
Consumers	Inhalation	1.67 mg/m <sup>3</sup>	Chronic effects systemic		

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zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)					
Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Consumers	Dermal	4.8 mg/kg/24h	Chronic effects systemic		
Consumers	Oral	0.19 mg/kg/24h	Chronic effects local		

### PNEC

zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)			
Route of exposure	Value	Value determination	Source
Microorganisms in sewage treatment	3.8 mg/l		
Water (regular leak)	4 µg/l		
Marine water	4.6 µg/l		
Freshwater sediment	0.0701 mg/kg		
Sea sediments	0.00701 mg/kg		

### 8.2. Exposure controls

Ensure sufficient ventilation or extraction of the work area. In case of exceeding the NPK-P, use suitable respiratory protection. Avoid contact with eyes and skin. Observe hygienic measures when working with chemicals. Do not eat, drink and smoke during work. Wash hands with lukewarm soap and water before breaks, meals and after work. Adapt personal protective equipment to the nature of the work.

#### Eye/face protection

Protective goggles or face shield (based on the nature of the work performed).

#### Skin protection

Protective work clothing; remove contaminated clothing, wash before further use. Protective gloves (material e.g. nitrile butadiene, 0.12 mm; penetration time 4h.). When choosing, follow the manufacturer's recommendations, the material must be impermeable and resistant to the components of the mixture. Test in a specific workplace before first use. Replace damaged gloves. Unsuitable material: natural rubber, natural latex, polychlorprene, chlorprene rubber.

#### Respiratory protection

It is not necessary if the recommended use is followed. In case of insufficient ventilation or accident, use a mask with an organic vapor and aerosol filter type A.

#### Thermal hazard

Not available.

#### Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	solid
Colour	Beige
Odour	characteristic
Melting point/freezing point	>230 °C
Boiling point or initial boiling point and boiling range	>250 °C
Flammability	The mixture is flammable but not easily ignited
Lower and upper explosion limit	data not available
Flash point	>200 °C
Auto-ignition temperature	data not available
Decomposition temperature	data not available

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pH	data not available
Kinematic viscosity	data not available
Solubility in water	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	0.95 g/cm <sup>3</sup> at 20 °C
Relative vapour density	data not available
Particle characteristics	data not available

### 9.2. Other information

VOC content: < 3 %

Explosive properties: The mixture does not show explosive properties.

Oxidizing properties: The mixture is not classified as oxidizing.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

When used in the standard way, there is not any dangerous reaction with other substances.

### 10.2. Chemical stability

The mixture is stable under normal environmental conditions, storage and handling.

### 10.3. Possibility of hazardous reactions

The mixture does not show dangerous reactions if the instructions for use are followed.

### 10.4. Conditions to avoid

Contact with temperatures outside the recommended operating temperature range.

### 10.5. Incompatible materials

Strong oxidizing agents, acids.

### 10.6. Hazardous decomposition products

Under normal conditions, the mixture does not decompose. Thermal decomposition at high temperatures or in case of fire may produce dangerous decomposition products (CO<sub>x</sub>, NO<sub>x</sub>, aldehydes, ketones, sulfur oxides, phosphorus oxides, pyrolysis products, toxic, containing fluorine). Do not inhale thermal decomposition products.

## SECTION 11: Toxicological information

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

The mixture is not classified as dangerous according to Regulation (EC) No. 1272/2008, as amended.

#### Acute toxicity

Based on available data the classification criteria are not met.

zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)					
Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD <sub>50</sub>	3100 mg/kg		Rat	
Oral	NOAEL	125 mg/kg	28 days	Rat	
Dermal	LD <sub>50</sub>	>5000 mg/kg		Rabbit	

#### Skin corrosion/irritation

Based on available data the classification criteria are not met.

#### Serious eye damage/irritation

Based on available data the classification criteria are not met.

#### Respiratory or skin sensitisation

The mixture contains sensitizing components in an amount below the limit for the classification of the mixture. May cause an allergic reaction.

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**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.

**Toxicity for specific target organ - single exposure**

Based on available data the classification criteria are not met.

**Toxicity for specific target organ - 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**

It does not contain substances causing disruption of the endocrine system. Contains a sensitizing substance in an amount below the limit for classification, may cause an allergic reaction. In rare cases, it may cause mild eye irritation if accidentally rubbed into the eyes. Difficulty breathing, headache, nausea may also occur.

**SECTION 12: Ecological information**

**12.1. Toxicity**

The ecotoxic effects of the mixture were not assessed. Observe the usual environmental precautions.

**Acute toxicity**

zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)				
Parameter	Value	Exposure time	Species	Environment
EC <sub>50</sub>	75 mg/l	48 hours	Invertebrates (Daphnia magna)	

**12.2. Persistence and degradability**

The mixture is difficult to biodegrade. Main component of the mixture: < 5%/27 days.

**12.3. Bioaccumulative potential**

Not determined, bioaccumulation is unlikely.

**12.4. Mobility in soil**

It's not mobile.

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

Mixture does not meet the criteria for classification as PBT and vPvB.

**12.6. Endocrine disrupting properties**

Substances with these properties in accordance with the criteria set out in Commission Regulation (EU) 2017/2100 or (EU) 2018/605 are not included.

**12.7. Other adverse effects**

Do not allow to enter soil, ground or surface water or drains. Observe the usual environmental precautions.

**SECTION 13: Disposal considerations**

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### 13.1. Waste treatment methods

Dispose of mixture and packaging residues in accordance with local waste disposal regulations. Hand over to an authorized person for disposal. Do not dispose of with household waste. Dispose of contaminated packaging as hazardous waste.

#### Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

#### Waste type code

12 01 12\* spent waxes and fats

#### Packaging waste type code

15 01 02 plastic packaging

15 01 10\* packaging containing residues of or contaminated by hazardous substances

(\* ) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

## SECTION 14: Transport information

### 14.1. UN number or ID number

not subject to transport regulations

### 14.2. UN proper shipping name

not relevant

### 14.3. Transport hazard class(es)

not relevant

### 14.4. Packing group

not relevant

### 14.5. Environmental hazards

not relevant

### 14.6. Special precautions for user

Transport in packages that match the properties of the mixture. Observe the prescribed marking for cargo.

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

not relevant

## SECTION 15: Regulatory information

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

Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the 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) 2020/878 amending Annex II to Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). Commission Delegated Regulation (EU) 2021/849 of 11 March 2021 amending, for the purposes of adapting to technical and scientific progress, Part 3 of Annex VI to Regulation (EC) No 1272/2008 of the European Parliament and of the Council on classification, labeling and packaging of substances and mixtures. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents, as amended. Commission Regulation (EU) No 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals.

### 15.2. Chemical safety assessment

No chemical hazard assessment was performed for this mixture.

#### More information

This information only indicates the basic regulations listed in this Safety Data Sheet. Please note the possible existence of additional regulations supplementing these Regulations. We refer to all applicable national, international and local regulations and regulations.

## SECTION 16: Other information

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### A list of standard risk phrases used in the safety data sheet

H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.

### A list of additional standard phrases used in the safety data sheet

EUH208	Contains zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate). May produce an allergic reaction.
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### Other important information about human health protection

The mixture should not be used for any purpose other than that for which it is intended (see point 1.2). Because the supplier can not control the specific conditions of use of the mixture, it is the responsibility of the user to adapt the prescribed warnings to local laws and regulations. Safety information describes the product in terms of safety and can not be considered as technical product information.

### Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
EC	Identification code for each substance listed in EINECS
EC <sub>50</sub>	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LD <sub>50</sub>	Lethal dose of a substance in which it can be expected death of 50% of the population
log K <sub>ow</sub>	Octanol-water partition coefficient
NOAEL	No observed adverse effect level
NPK	Maximum admissible concentration
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible Exposure Limit
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Eye Dam.	Serious eye damage

### Training guidelines





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According to § 103 and § 104 of Act No. 262/2006 Coll., The Labor Code, as amended. Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

#### **Recommended restrictions of use**

The mixture should not be used for any purpose other than that for which it is intended (see point 1.2). Because the specific conditions of use of the substance are beyond the control of the supplier, it is the responsibility of the user to adapt the prescribed warnings to local laws and regulations. Safety information describes the product in terms of safety and can not be considered as technical product information.

#### **Information about data sources used to compile the Safety Data Sheet**

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

#### **The changes (which information has been added, deleted or modified)**

Adaptation of BL updated Annex II of the REACH Regulation as amended by Commission Regulation (EU) 2020/878.

#### **Statement**

The safety data sheet contains the data needed to ensure safety and health at work and environmental protection. These data correspond to the current state of knowledge and experience and are in accordance with applicable legal regulations. They can not be considered as a guarantee of the suitability and usability of the product for a specific application. The user is responsible for the treatment under existing laws and regulations.

