1.4 Emergency telephone number: For Chemical Emergencies: CHEMTREC: +1 703 741 5970

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
The product is not classified as hazardous, according to the CLP regulation.

2.2 Label elements
Labelling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void
Signal word Void
Hazard statements Void
Additional information:
Contains 2-methyl-2H-isothiazol-3-one. May produce an allergic reaction.
Safety data sheet available on request.

2.3 Other hazards
Results of PBT and vPvB assessment
PBT: None.
vPvB: None.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
Description: wax emulsion

Dangerous components:

| CAS: 67-63-0 | Propan-2-ol | Flam. Liq. 2, H223; Eye Irrit. 2, H319; STOT SE 3, H336 | 3-<5% |
| EINECS: 200-661-7 | Flamm. | E; Reg.nr.: 01-2119457558-25 |

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
General information: Immediately remove any clothing soiled by the product.
After inhalation: Supply fresh air; consult doctor in case of complaints.
After skin contact: Immediately wash with water and soap and rinse thoroughly.

(Contd. on page 2)
SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents:
  - CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- Protective equipment: Do not inhale explosion gases or combustion gases.
- Additional information
  - Product contains water and is non-combustible.
  - Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective clothing.
- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up:
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- 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 No special precautions are necessary if used correctly.
- Information about fire - and explosion protection:
  - The product is not flammable.
  - Protect from heat.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles: Store in a cool location.
  - Information about storage in one common storage facility: Not required.
- Further information about storage conditions:
  - Protect from frost.
  - Store in cool, dry conditions in well sealed receptacles.
- 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 3)
8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>CAS: 67-63-0 Propan-2-ol</th>
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<tbody>
<tr>
<td>WEL</td>
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</tbody>
</table>

DNELs

<table>
<thead>
<tr>
<th>CAS: 67-63-0 Propan-2-ol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>worker, long-term exposure, systemic effects</td>
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<tr>
<td>Dermal</td>
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<tr>
<td>Inhalative</td>
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<tr>
<td>worker, long-term exposure, systemic effects</td>
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</table>

PNECs

CAS: 67-63-0 Propan-2-ol

| fresh water | 140.9 mg/l (not specified) |
| marine water | 140.9 mg/l (not specified) |
| soil         | 28 mg/kg (not specified)  |
| sediment (fresh water) | 552 mg/kg (not specified) |
| sediment (marine water) | 552 mg/kg (not specified) |

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

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Avoid contact with the eyes and skin.

Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Only use chemical-protective gloves with CE-labelling of category III.

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

Material of gloves:

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.5 mm

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.

Penetration time of glove material

For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 16523-1:2015; Level 6).

The determined penetration times according to EN 16523-1:2015 are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

Eye protection: Safety glasses

Body protection: Protective work clothing

(Contd. of page 4)
9.1 Information on basic physical and chemical properties

- General Information
- Appearance:
  - Form: Fluid
  - Colour: White
- Odour:
  - Odour threshold: Not determined.
- pH-value at 20 °C: ≈ 4 (DIN ISO 976)
- Change in condition
  - Melting point/freezing point: Undetermined.
  - Initial boiling point and boiling range: ≈ 96 °C
- Flash point: Not applicable.
- Flammability (solid, gas): Not applicable.
- Ignition temperature: Not determined.
- 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.
- Oxidising properties: None
- Vapour pressure: Not determined.
- Density at 20 °C: ≈ 0.98 g/cm³ (DIN EN ISO 2811-1)
- Relative density: Not determined.
- Vapour density: Not determined.
- Evaporation rate: Not determined.
- Solubility in / Miscibility with water: Fully miscible.
- Partition coefficient: n-octanol/water: Not determined.
- Viscosity:
  - Dynamic at 23 °C: ≈ 20 mPas (DIN EN ISO 3219)
  - Kinematic: Not determined.
- Solvent content:
  - Water: ≈ 55 %
- 9.2 Other information: No further relevant information available.

10.1 Reactivity: No further relevant information available.
10.2 Chemical stability
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.
Trade name: LUBA-print® 338

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: 67-63-0 Propan-2-ol | Oral LD50 5,280 mg/kg (rat) | Dermal LD50 12,800 mg/kg (rabbit) | Inhalative LC50/4h 30 mg/l (rat) |

- Primary irritant effect: Based on available data, the classification criteria are not met.
- 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 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.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

CAS: 67-63-0 Propan-2-ol

| EC50 = 1,000 mg/l (alga) (Scenedesmus subspicatus / 72 h) |
| 13,299 mg/l (daphnia) (Daphnia Magna / 48 h) |
| EC10 5,175 mg/l (bacteria) (Pseudomonas putida / 18 h) |
| LC50 9,640 mg/l (fish) (Pimephales promelas / 96 h) |

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:
- Behaviour in sewage processing plants: Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. Do not release untreated into natural waters.
- 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.

12.5 Results of PBT and vPvB assessment
According to Annex XIV of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.
Self classification.
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

07 07 01* aqueous washing liquids and mother liquors

Uncleaned packaging:

Recommendation: Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

14.1 UN-Number

ADR/RID/ADN, ADN, IMDG, IATA Void

14.2 UN proper shipping name

ADR/RID/ADN, ADN, IMDG, IATA Void

14.3 Transport hazard class(es)

ADR/RID/ADN, ADN, IMDG, IATA Class Void

14.4 Packing group

ADR/RID/ADN, IMDG, IATA Void

14.5 Environmental hazards:

Marine pollutant: No

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

UN "Model Regulation": Void

SECTION 15: Regulatory information

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

Directive 2012/18/EU

Named dangerous substances - ANNEX I None of the ingredients is listed.

National regulations:

Information about limitation of use:
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning pregnant and lactating women must be observed.

Water hazard class: Water hazard class 1 (German AwSV, Self-assessment): slightly hazardous for water.
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**
H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

**Department issuing SDS:**
Product Safety Department
E-Mail: msds@munzing.com

**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
ELINCS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids – Category 2
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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