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

1.1 Product identifier

EDAPLAN® 915

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

No further relevant information available.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:
MÜNZING CHEMIE GmbH
Münzingstrasse 2
74232 Abstatt, Germany
E-Mail: info@munzing.com
Tel.: +49 7131 987-100

Further information obtainable from:
Product Safety Department
E-mail (MSDS): msds@munzing.com

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

Skin Irrit. 2 H315 Causes skin irritation.
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

Signal word Warning

Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Precautionary statements

P264 Wash thoroughly after handling.
P280 Wear protective gloves / 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.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P337+P313 If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: None.
vPvB: None.

(Contd. on page 2)
SECTION 3: Composition/information on ingredients

- 3.2 Chemical characterisation: Mixtures
- **Description:** Polyether ester, neutralised with amine

**Dangerous components:**

<table>
<thead>
<tr>
<th>CAS:</th>
<th>108-01-0</th>
<th>2-dimethylaminoethanol</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS:</td>
<td>203-542-8</td>
<td></td>
</tr>
<tr>
<td>Regnr.:</td>
<td>01-2119492298-24</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Flamm. Ldg. 3; H226; Acute Tox. 3, H331; Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312; STOT SE 3, H335</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1-&lt;3%</td>
</tr>
</tbody>
</table>

**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 skin contact:** Generally the product does not irritate the skin.
  - **After eye contact:** Rinse opened eye for several minutes under running water.
  - **After swallowing:** If symptoms persist consult doctor.

- 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

- 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
  - **In case of fire, the following can be released:** Carbon monoxide (CO)
  - **Nitrogen oxides (NOx)**

- 5.3 Advice for firefighters
  - **Protective equipment:** Do not inhale explosion gases or combustion gases.

- 5.4 Additional information
  - 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
  - Ensure adequate ventilation
  - Wear protective clothing.

- 6.2 Environmental precautions:
  - Do not allow to penetrate the ground/soil.
  - Dilute with plenty of 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.
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: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
  - Storage:
    - Requirements to be met by storerooms and receptacles: No special requirements.
    - Information about storage in one common storage facility: Store away from oxidising agents.
    - Further information about storage conditions: None.
- 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.
- 8.1 Control parameters
  - Ingredients with limit values that require monitoring at the workplace:
    - CAS: 108-01-0 2-dimethylaminoethanol
      - WEL: Short-term value: 22 mg/m³, 6 ppm
        - Long-term value: 7.4 mg/m³, 2 ppm
    - DNELs
      - CAS: 108-01-0 2-dimethylaminoethanol
        - Dermal: worker, long-term exposure, systemic effects: 1.04 mg/kg bw/day (human)
        - Inhalative: worker, long-term exposure, systemic effects: 7.4 mg/m³ (human)
        - Consumer, long-term exposure, systemic effects: 2.2 mg/m³ (human)
    - PNECs
      - CAS: 108-01-0 2-dimethylaminoethanol
        - fresh water: 0.0661 mg/l (not specified)
        - marine water: 0.00661 mg/l (not specified)
        - aqua - intermittent release: 0.0661 mg/l (not specified)
        - soil: 0.0177 mg/kg (not specified)
        - sediment (fresh water): 0.0529 mg/kg (not specified)
        - sewage treatment plant: 10 mg/l (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: Wash hands before breaks and at the end of work.
  - Respiratory protection: Not required.
  - Protection of hands:
    - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
    - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
    - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.
  - Material of gloves
    - Butyl rubber, BR

See Section 13 for disposal information.
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 374 Part 3: Level 6).
  The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
  The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection**: Goggles recommended during refilling
- **Body protection**: Protective work clothing

**SECTION 9: Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**
  - **General Information**
  - **Appearance:**
    - **Form:** Fluid
    - **Colour:** Brown
    - **Odour:** Amine-like
    - **Odour threshold:** Not determined.
  - **pH-value at 20 °C:** 8.5 (DIN ISO 976)
  - **Change in condition**
    - **Melting point/freezing point:** Undetermined.
    - **Initial boiling point and boiling range:** Undetermined.
  - **Flash point:** 85 °C (DIN EN ISO 2719)
  - **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:** 1 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.
Aspiration hazard

STOT-repeated exposure

Germ cell mutagenicity

· 500 mPas (DIN EN ISO 3219)

Dermal LD50 1,219 mg/kg (rabbit) (OECD 402)

10.2 Chemical stability

No further relevant information available.

No dangerous decomposition products known.

Causes skin irritation.

No dangerous reactions known.

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

11.1 Information on toxicological effects

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

LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>CAS: 108-01-0 2-dimethylaminoethanol</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>1,183 mg/kg (rat) (OECD 401)</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>1,219 mg/kg (rabbit) (OECD 402)</td>
</tr>
<tr>
<td>Inhalative LC50</td>
<td>5.9 mg/l (rat) (OECD 403, 4 h)</td>
</tr>
</tbody>
</table>

Primary irritant effect:

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.

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.

12.1 Toxicity

Aquatic toxicity:

CAS: 108-01-0 2-dimethylaminoethanol

EC50 66.1 mg/l (alga (green alga / 72 h)
Trade name: EDAPLAN® 915

98.4 mg/l (daphnia) (Daphnia magna / 48 h)
146.6 mg/l (fish) (Leuciscus idus / 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**: 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**: Not hazardous for water.
- **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.
- **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.

**European waste catalogue**

| 16 03 05* | organic wastes containing dangerous substances |

- **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**: Void
  - **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.
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.
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- National regulations:

- Waterhazard class: Not hazardous for water.

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
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H331 Toxic if inhaled.
H335 May cause respiratory irritation.

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
- 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)
- 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. 3: Flammable liquids – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Acute Tox. 3: Acute toxicity – Category 3
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- Skin Irrit. 2: Skin corrosion/irritation – Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
- STOT SE 3: Specific target organ toxicity (single exposure) – Category 3