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

1.1 Product identifier

Trade name: EDAPLAN® LA 452

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

Application of the substance / the mixture
Wetting agent
Leveling agents

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
Acute Tox. 4 H302 Harmful if swallowed.
Skin Irrit. 2 H315 Causes skin irritation.
Eye Dam. 1 H318 Causes serious eye damage.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

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

[Image: GHS05 GHS07 GHS09]

Signal word Danger

Hazard-determining components of labelling:
Sodium diisotridecy1 sulphosuccinate
Poly(oxy-1,2-ethanediyl), alpha-hexyl-omega-hydroxy-

Hazard statements
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P330 Rinse mouth.

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

- **3.2 Chemical characterisation: Mixtures**
  - **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**
  - CAS: 55184-72-0
  - EINECS: 259-515-6
  - Reg. nr.: 01-2119970177-31
  - Sodium diisotridecy1 sulfoisuccinate
    - Eye Dam.: 1, H318; Aquatic Chronic 2, H411; Skin Irrit. 2, H315
    - 50-75%
  - Poly(oxy-1,2-ethanediyl), alpha-hexyl-omega-hydroxy-
    - Eye Dam.: 1, H318; Acute Tox. 4, H302
    - 10-20%
  - Isotridecan-1-ol
    - Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315
    - 1-3%

- **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. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
  - **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
  - **After eye contact:**
    - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  - **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.
  - **For safety reasons unsuitable extinguishing agents:** Water with full jet

- **5.2 Special hazards arising from the substance or mixture**
  - In case of fire, the following can be released:
    - Sulphur dioxide (SO2)
    - Carbon monoxide (CO)

- **5.3 Advice for firefighters**
  - **Protective equipment:** Do not inhale explosion gases or combustion gases.
See Section 13 for disposal information.

8.1 Control parameters

Ensure adequate ventilation
Wear protective clothing.

6.2 Environmental precautions:
Do not allow to penetrate the ground/soil.
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:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

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: 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.

8.1 Control parameters
Ingredients with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

<table>
<thead>
<tr>
<th>CAS: 55184-72-0 Sodium dioctyldecal sulfosuccinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Dermal</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Inhalative</td>
</tr>
</tbody>
</table>

(Contd. on page 4)
Trade name: **EDAPLAN® LA 452**

---

### CAS: 27458-92-0 Isotridecan-1-ol

<table>
<thead>
<tr>
<th>Mode of Exposure</th>
<th>Duration</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral consumer</td>
<td>long-term</td>
<td>2.1 mg/kg bw/day (human)</td>
</tr>
<tr>
<td>Dermal worker</td>
<td>long-term</td>
<td>6.94 mg/kg bw/day (human)</td>
</tr>
<tr>
<td>Inhalative</td>
<td>long-term</td>
<td>4.2 mg/kg bw/day (human)</td>
</tr>
</tbody>
</table>

---

### PNECs

**CAS: 55184-72-0 Sodium diisotridecyl sulfosuccinate**

<table>
<thead>
<tr>
<th>Environment</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>fresh water</td>
<td>0.0015 mg/l (not specified)</td>
</tr>
<tr>
<td>marine water</td>
<td>0.00015 mg/l (not specified)</td>
</tr>
<tr>
<td>aqua - intermittent release</td>
<td>0.0196 mg/l (not specified)</td>
</tr>
<tr>
<td>sediment (fresh water)</td>
<td>38.38 mg/kg (not specified)</td>
</tr>
<tr>
<td>sediment (marine water)</td>
<td>3.838 mg/kg (not specified)</td>
</tr>
<tr>
<td>sewage treatment plant</td>
<td>1.4 mg/l (not specified)</td>
</tr>
</tbody>
</table>

---

### CAS: 27458-92-0 Isotridecan-1-ol

<table>
<thead>
<tr>
<th>Environment</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>fresh water</td>
<td>0.000072 mg/l (not specified)</td>
</tr>
<tr>
<td>marine water</td>
<td>0.000007 mg/l (not specified)</td>
</tr>
<tr>
<td>aqua - intermittent release</td>
<td>0.003 mg/l (not specified)</td>
</tr>
<tr>
<td>soil</td>
<td>0.314 mg/kg (not specified)</td>
</tr>
<tr>
<td>sediment (fresh water)</td>
<td>0.021 mg/kg (not specified)</td>
</tr>
<tr>
<td>sediment (marine water)</td>
<td>0.002 mg/kg (not specified)</td>
</tr>
<tr>
<td>sewage treatment plant</td>
<td>10 mg/l (not specified)</td>
</tr>
</tbody>
</table>

---

### 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.
    - Immediately remove all soiled and contaminated clothing
    - Wash hands before breaks and at the end of work.
    - Avoid contact with the eyes and skin.
  - **Respiratory protection:** Use suitable respiratory protective device only when aerosol or mist is formed.
  - **Protection of hands:**
    - Protective gloves
    - 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
  - **Material of gloves**
    - Butyl rubber, BR
    - Neoprene gloves
    - 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).
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:
- Form: Fluid
- Colour: Yellow
- Odour: Characteristic
- Odour threshold: Not determined.

pH-value (20 g/l) at 20 °C: ≈ 6 (DIN ISO 976)

Change in condition
- Melting point/freezing point: Undetermined.
- Initial boiling point and boiling range: Undetermined.

Flash point: > 100 °C (DIN EN ISO 2719)

Flammability (solid, gas): Product is not flammable.

Ignition temperature: > 200 °C (calculated)

Decomposition temperature: Not determined.

Auto-ignition temperature: Product is not self-igniting.

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: ≈ 1.03 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 20 °C: ≈ 700 mPas (DIN EN ISO 3219)

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.

(Contd. on page 6)
SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity
  Harmful if swallowed.

11.2 LD/LC50 values relevant for classification:

<table>
<thead>
<tr>
<th>CAS: 55184-72-0 Sodium diisotridecyl sulfosuccinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Dermal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 31726-34-8 Poly(oxy-1,2-ethanediyl), alpha-hexyl-omega-hydroxy-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
</tr>
<tr>
<td>Dermal</td>
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</tr>
<tr>
<td>Dermal</td>
</tr>
</tbody>
</table>

- Primary irritant effect:
  - Skin corrosion/irritation
    Causes skin 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.

SECTION 12: Ecological information

12.1 Aquatic toxicity:

<table>
<thead>
<tr>
<th>CAS: 55184-72-0 Sodium diisotridecyl sulfosuccinate</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50</td>
</tr>
<tr>
<td>4.9 mg/l (daphnia) (48h)</td>
</tr>
<tr>
<td>EC10</td>
</tr>
<tr>
<td>LC50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 31726-34-8 Poly(oxy-1,2-ethanediyl), alpha-hexyl-omega-hydroxy-</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC50</td>
</tr>
<tr>
<td>&gt;100 mg/l (daphnia) (Daphnia magna / 48h)</td>
</tr>
<tr>
<td>LC50</td>
</tr>
</tbody>
</table>
LIQUID, N.O.S. (Sodium diisotridecyl sulfosuccinate)

12.2 Persistence and degradability 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:
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water
Do not allow product 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.

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.

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, IMDG, IATA UN3082

14.2 UN proper shipping name
ADR/RID/ADN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Sodium diisotridecyl sulfosuccinate)
IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Sodium diisotridecyl sulfosuccinate, Isotridec-1-ol), MARINE POLLUTANT
IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Sodium diisotridecyl sulfosuccinate)
Safety data sheet
according to 1907/2006/EC, Article 31

Trade name: EDAPLAN® LA 452

14.3 Transport hazard class(es)
- ADR/RID/ADN, IMDG, IATA

- Class 9 Miscellaneous dangerous substances and articles.

- Label 9

14.4 Packing group
- ADR/RID/ADN, IMDG, IATA

- III

14.5 Environmental hazards:
- Product contains environmentally hazardous substances:
  Sodium diisotridecyl sulfosuccinate

- Marine pollutant:
  Symbol (fish and tree)

- Special marking (ADR/RID/ADN):
  Symbol (fish and tree)

- Special marking (IATA):
  Symbol (fish and tree)

14.6 Special precautions for use
- Warning: Miscellaneous dangerous substances and articles.
- 90
- EMS Number: F-A,S-F
- Stowage Category: A

14.7 Transport in bulk according to Annex II of
Marpol and the IBC Code
- Not applicable.

Transport/Additional information:

- ADR/RID/ADN

- Limited quantities (LQ) 5L
- Transport category 3

UN "Model Regulation":
- UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM DIISOTRIDECYL SULFOSUCCINATE), 9, III

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- Directive 2012/18/EU
- Seveso category E2 Hazardous to the Aquatic Environment
- Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3
- National regulations:

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

- Waterhazard class: Water hazard class 2 (Self-assessment): hazardous for water.
Trade name: EDAPLAN® LA 452

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
H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H411 Toxic to aquatic life with long lasting effects.

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
Acute Tox. 4: Acute toxicity – Category 4
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
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

* Data compared to the previous version altered.