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

1.1 Product identifier
- Trade name: EDAPLAN® LA 415

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 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

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
  Flm. Lq. 3 H226 Flammable liquid and vapour.

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
  GHS02

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: Solution of modified polysiloxane in 1-methoxy-2-propynyl acetate

<table>
<thead>
<tr>
<th>CAS:</th>
<th>2-methoxy-1-methylethyl acetate</th>
<th>20-50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EINECS: 203-603-9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reg.nr.: 01-2119475791-29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAS: 9041-33-2</th>
<th>Poly(oxyethylene)(oxypropylene) glycol monoallyl ether</th>
<th>1-&lt;5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymer</td>
<td>Skin Irrit. 2, H315; Eye Irrit. 2, H319</td>
<td></td>
</tr>
</tbody>
</table>

| CAS: 70657-70-4 | 2-methoxypropyl acetate | <0.3% |
| EINECS: 274-724-2 |                           |      |

· 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 and to be sure call for a doctor.
  · After skin contact: Immediately wash with water and soap and rinse thoroughly.
  · After eye contact: Rinse opened eye for several minutes under running water. Then 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. 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: Do not inhale explosion gases or combustion gases.
  · 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
  · Use respiratory protective device against the effects of fumes/dust/aerosol.
  · Wear protective clothing.
  · Wear protective equipment. Keep unprotected persons away.

· 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).
  · Do not flush with water or aqueous cleansing agents

· 6.4 Reference to other sections
  · See Section 7 for information on safe handling.
SECTION 7: Handling and storage

7.1 Precautions for safe handling
No special precautions are necessary if used correctly.
Keep away from heat and direct sunlight.
Use only in well ventilated areas.

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: Store away from oxidising agents.
Further information about storage conditions: 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:

<table>
<thead>
<tr>
<th>CAS: 108-65-6 2-methoxy-1-methylethyl acetate</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

DNELs

<table>
<thead>
<tr>
<th>CAS: 108-65-6 2-methoxy-1-methylethyl acetate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral consumer, long-term exposure, systemic effects</td>
</tr>
<tr>
<td>Dermal consumer, long-term exposure, systemic effects</td>
</tr>
<tr>
<td>Inhalative consumer, long-term exposure, systemic effects</td>
</tr>
<tr>
<td>Dermal worker, long-term exposure, systemic effects</td>
</tr>
</tbody>
</table>

PNECs

<table>
<thead>
<tr>
<th>CAS: 108-65-6 2-methoxy-1-methylethyl acetate</th>
</tr>
</thead>
<tbody>
<tr>
<td>freshwater 0.635 mg/l (not specified)</td>
</tr>
<tr>
<td>marine water 0.0635 mg/l (not specified)</td>
</tr>
<tr>
<td>aqua - intermittent release 6.35 mg/l (not specified)</td>
</tr>
<tr>
<td>soil 0.29 mg/kg (not specified)</td>
</tr>
<tr>
<td>sediment (fresh water) 3.29 mg/kg (not specified)</td>
</tr>
<tr>
<td>sediment (marine water) 0.329 mg/kg (not specified)</td>
</tr>
<tr>
<td>sewage treatment plant 100 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:
The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Use suitable respiratory protective device only when aerosol or mist is formed.

Protection of hands:
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves
Nitrile rubber, NBR
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.

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.

Eye protection: Goggles recommended during refilling

Body protection: Protective work clothing

9.1 Information on basic physical and chemical properties

General Information

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

pH-value (20 g/l) at 20 °C: ≈ 7.5 (DIN ISO 976)

Change in condition
Melting point/freezing point: Undetermined.
Initial boiling point and boiling range: ≈ 146 °C

Flash point: ≈ 45 °C (DIN EN ISO 2719)

Flammability (solid, gas): Not applicable.

Ignition temperature: > 315 °C (CAS 108-65-6)

Decomposition temperature: Not determined.

Explosive properties: Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

Explosion limits:
Lower: 1.5 Vol % (CAS 108-65-6)
Upper: 10.8 Vol % (CAS 108-65-6)

Oxidising properties: None

Vapour pressure at 20 °C: 3-5 hPa (CAS 108-65-6)

Density at 20 °C: ≈0.98 g/cm³ (DIN EN ISO 2811-1)

Vapour density: Not determined

Evaporation rate: Not determined.
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
  - Forms explosive gas mixture with air.
  - Develops readily flammable gases/fumes.
- 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: 108-65-6 2-methoxy-1-methylethyl acetate|
| Oral  | LD50 | >5,000 mg/kg (rat) |
| Dermal | LD50 | >2,000 mg/kg (rat) |
| Inhalative  | LC50/4h | 35.7 mg/l (rat) |

- Primary irritant effect:
  - 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: 108-65-6 2-methoxy-1-methylethyl acetate|
| EC50 | >1,000 mg/l (alga) (Selenastrum capricornutum / 72 h (OECD 201)) |
Trade name: EDAPLAN® LA 415

>500 mg/l (daphnia) (Daphnia magna / 48 h)
EC10 >1,000 mg/l (bacteria) (activated sludge / 0.5 h (ISO 8192))
LC50 134 mg/l (fish) (Oncorhynchus mykiss / 96 h (OECD 203))
NOEC >100 mg/l (daphnia) (Daphnia magna / 21 d (OECD 202))
47.5 mg/l (fish) (Oryzias latipes / 14 d (OECD 204))

- **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.
  - **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.

- **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**: UN1993

- **14.2 UN proper shipping name**
  - **ADR/RID/ADN**: 1993 FLAMMABLE LIQUID, N.O.S. (2-methoxy-1-methylethyl acetate)
  - **IMDG, IATA**: FLAMMABLE LIQUID, N.O.S. (2-methoxy-1-methylethyl acetate)
Trade name: EDAPLAN® LA 415

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

- **Class**
  - 3 Flammable liquids.

- **Label**
  - 3

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

- **14.5 Environmental hazards:**
  - Marine pollutant: No

- **14.6 Special precautions for user**
  - Warning: Flammable liquids.
  - Danger code (Kemler): 30
  - EMS Number: F-E,S-E
  - 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
  - Tunnel restriction code: D/E

- **UN "Model Regulation":**
  - UN 1993 FLAMMABLE LIQUID, N.O.S. (2-METHOXY-1-METHYLETHYL ACETATE), 3, III

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**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.
  - Seveso category P5c FLAMMABLE LIQUIDS
  - Qualifying quantity (tonnes) for the application of lower-tier requirements: 5,000 t
  - Qualifying quantity (tonnes) for the application of upper-tier requirements: 50,000 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 1 (German AvSV, Self-assessment): slightly hazardous for water.

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

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(Contd. on page 8)
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.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
  - H335 May cause respiratory irritation.
  - H360D May damage the unborn child.

- 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
  - Skin Irrit. 2: Skin corrosion/irritation – Category 2
  - Eye Irrit. 2: Serious eye damage/eye irritation – Category 2
  - Repr. 1B: Reproductive toxicity – Category 1B
  - STOT SE 3: Specific target organ toxicity (single exposure) – Category 3