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

1.1 Product identifier
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
   Münzingerstrasse 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
   The product is not classified, according to the CLP regulation.

2.2 Label elements
   Labelling according to Regulation (EC) No 1272/2008
   Hazard pictograms Void
   Signal word Void
   Hazard statements Void

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
3. Description: Blend of polyethers and surfactants
3. Dangerous components: Void

SECTION 4: First aid measures

4.1 Description of first aid measures
   General information: No special measures required.
   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: 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
  - Wear protective clothing.
  - Use respiratory protective device against the effects of fumes/dust/aerosol.
- 6.2 Environmental precautions: 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.
  - See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling: No special measures required.
- 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:
    - The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
  - 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.

(Contd. of page 1)
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**
  - 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. 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**
  - 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: Yellow-brown
    - Odour: Slight
    - Odour threshold: Not determined.

  - **pH-value (20 g/l) at 20 °C:** ≈4 (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):** 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 applicable
    - Upper: Not applicable

  - **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:** Dispersible.
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  No dangerous reactions known.
· 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.
  · 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 (carcinogenity, 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:  No further relevant information available.
· 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:  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.

(Contd. on page 5)
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 06 organic wastes other than those mentioned in 16 03 05

- 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 the MARPOL and the IBC Code
  - Not applicable.

- Transport/Additional information:
  - Not a dangerous good to the above specifications.

- 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:
    - Water hazard 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.

- **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)
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative