1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : UCA2M

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

Use of the Substance/Mixture : Additive
Recommended restrictions on use : None known.

1.3 Details of the supplier of the safety data sheet

Company : Chemetall Ltd
Denbigh Road
Bletchley Milton Keynes MK1 1PB

Lead Organisation :
Contact person :
Telephone : 01908 649333
Telefax : 01908 373939

Product safety :
Telephone : +49(0)6971652832
E-mail address : msds.de@chemetall.com

1.4 Emergency telephone number

Emergency telephone number : 01908 649333

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (67/548/EEC, 1999/45/EC)
Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

2.2 Label elements

Labelling according to EC Directives (1999/45/EC)
Further information : The product does not need to be labelled in accordance with EC directives or respective national laws.

2.3 Other hazards
3. Composition/information on ingredients

3.1 Substances
Identification: UCA2M

3.2 Mixtures
Chemical nature: Aqueous surfactant solution.

Hazardous components

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonylphenol, ethoxylated</td>
<td>68412-54-4</td>
<td>Xi; R36/38 N; R51/53</td>
<td>Eye Irrit. 2; H319</td>
<td>&gt;= 0.1 - &lt; 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Skin Irrit. 2; H315</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aquatic Chronic 2; H411</td>
<td></td>
</tr>
</tbody>
</table>

WEL substance:
Glycerol

56-81-5
200-289-5

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

>= 10 - < 25

For the full text of the R-phrases mentioned in this Section, see Section 16.
For the full text of the H-statements mentioned in this Section, see Section 16.
For the full text of the Notas mentioned in this Section, see Section 16.

4. First aid measures

4.1 Description of first aid measures

If inhaled: Move to fresh air. If symptoms persist, call a physician.

In case of skin contact: Wash off with soap and plenty of water.
If symptoms persist, call a physician.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids. Consult a physician.

If swallowed: Rinse mouth. If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically. For specialist advice physicians should contact the Poisons Information Service.

5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media: Carbon dioxide (CO2), Dry powder, Alcohol-resistant foam, Water spray.

Unsuitable extinguishing media: High volume water jet.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting: May form toxic gases on heating or in case of fire. Carbon monoxide, Carbon dioxide (CO2).

5.3 Advice for firefighters

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Wear personal protective equipment.

6.2 Environmental precautions

Environmental precautions: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

6.3 Methods and materials for containment and cleaning up
Methods for cleaning up: Ensure adequate ventilation. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections
See chapter 8 and 13

7. Handling and storage

7.1 Precautions for safe handling
Advice on safe handling: Provide sufficient air exchange and/or exhaust in work rooms. Have eye wash bottle or eye rinse ready at the work place.

Advice on protection against fire and explosion: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers: Keep containers tightly closed in a cool, well-ventilated place. Protect from frost.

Storage temperature: 5 - 40 °C

7.3 Specific end uses
Specific use(s): Additive

8. Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>56-81-5</td>
<td>TWA</td>
<td>10 mg/m3</td>
<td>2005-04-06</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information: 2: Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

8.2 Exposure controls
Engineering measures
Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

Respiratory protection: In case of insufficient ventilation wear suitable respiratory equipment. Recommended Filter type: A-P2

Hand protection: Neoprene gloves butyl-rubber

Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

Eye protection: Safety glasses with side-shields conforming to EN166

Skin and body protection: Chemical resistant protective clothing according to DIN EN 13034 (Type 6)

Hygiene measures: Take off contaminated clothing and shoes immediately. Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and immediately after handling the product. Avoid contact with skin and eyes. Do not breathe vapour.

**Environmental exposure controls**

General advice: Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration.

### 9. Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

- **Appearance**: liquid viscous
- **Colour**: blue
- **Odour**: mild
- **Flash point**: not applicable
- **pH**: 8 at 20 °C (undiluted)
Boiling point/boiling range: ca. 100 °C

Density: 1.04 g/cm³ at 20 °C

Water solubility: completely miscible

Viscosity, dynamic: 5,000 mPa·s at 23 °C

9.2 Other information
Explosivity: no explosion risk

10. Stability and reactivity
10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions: None known.

10.4 Conditions to avoid
Conditions to avoid: Protect from frost, heat and sunlight.

10.5 Incompatible materials
Materials to avoid: Strong acids and oxidizing agents

10.6 Hazardous decomposition products
Risk of decomposition: No decomposition if used as directed.

11. Toxicological information
11.1 Information on toxicological effects
Acute toxicity
Acute oral toxicity
Glycerol : LD50: 12,600 mg/kg
Species: rat

Acute dermal toxicity
Glycerol : LD50: > 18,700 mg/kg
Species: rabbit

Skin corrosion/irritation
Skin irritation : May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation
Eye irritation : May cause eye irritation with susceptible persons.

Respiratory or skin sensitization
Sensitisation : no data available

12. Ecological information

12.1 Toxicity

Toxicity to fish
Glycerol : LC50: > 5,000 mg/l
Exposure time: 96 h
Species: Carassius auratus (goldfish)

LC50: > 10,000 mg/l
Exposure time: 96 h
Species: Leuciscus idus (Golden orfe)

Toxicity to daphnia and other aquatic invertebrates.
Glycerol : EC50: > 10,000 mg/l
Exposure time: 24 h
Species: Daphnia magna (Water flea)

Toxicity to algae
Glycerol : EC50: 2,900 mg/l
Species: Pseudokirchneriella subcapitata (green algae)
Toxicity to bacteria
Glycerol : EC50: > 10,000 mg/l
Species: Pseudomonas putida

12.2 Persistence and degradability
Biodegradability : no data available

12.3 Bioaccumulative potential
Bioaccumulation : no data available

12.4 Mobility in soil
Distribution among environmental compartments : no data available

12.5 Results of PBT and vPvB assessment
no data available

12.6 Other adverse effects
Additional ecological information : slightly water endangering
Do not flush into surface water or sanitary sewer system.
Do not allow material to contaminate ground water system.

13. Disposal considerations

13.1 Waste treatment methods
Product : Dispose of in accordance with local regulations.
Contaminated packaging : Dispose of as unused product.
Waste Code : Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

14. Transport information

ADR
Not dangerous goods

IATA
Not dangerous goods
15. Regulatory information

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

Water contaminating class: WGK 1 slightly water endangering (Germany) VVVWS A4

Other regulations: The product is classified and labelled in accordance with EC directives or respective national laws.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance.

16. Other information

Full text of R-phrases referred to under sections 2 and 3

R36/38 Irritating to eyes and skin.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Full text of H-Statements referred to under sections 2 and 3.

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H411 Toxic to aquatic life with long lasting effects.

Further information

The information provided is based on our current knowledge and experience and apply to the product as delivered. Regarding the product properties, these are not guaranteed. The delivery of this safety datasheet does not free the recipient of the product from his own responsibility to follow the relevant rules and regulations concerning this product.