

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 25.09.2014

Version number 1

Revision: 25.09.2014

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

- 1.1 Product identifier
- Trade name: **-EM 902-**
- Article number: **3.604**
- 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 Defoamers, Anti-foaming agent
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:

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#### SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008  
Eye Dam. 1      H318 Causes serious eye damage.  
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC  
Xi; Irritant  
R41:      Risk of serious damage to eyes.  
N; Dangerous for the environment  
R51/53:      Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- Information concerning particular hazards for human and environment:  
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
- Classification system:  
The classification is according to the latest editions of the EU-lists, and extended by company and literature data.
- 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



GHS05 GHS09

(Contd. on page 2)

GB

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 25.09.2014

Version number 1

Revision: 25.09.2014

Trade name: -EM 902-

(Contd. of page 1)

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Di-hydrogenated tallowfattyalkyl dimethyl ammonium chloride  
ethanol, 2-butoxy-, manufacture of, by-products from
- **Hazard statements**  
H318 Causes serious eye damage.  
H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**  
P280 Wear protective gloves/protective clothing/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.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

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

#### · **Dangerous components:**

|                                                                                                                              |                                                                                                                                                     |        |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| CAS: 61789-80-8<br>EINECS: 263-090-2<br>Reg.nr.: 01-2119533058-42-0000                                                       | Di-hydrogenated tallowfattyalkyl dimethyl ammonium chloride<br>Xi R41; N R50/53<br>Eye Dam. 1, H318; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 | 10<20% |
| CAS: 97338-06-2<br>EC number: 306-600-1                                                                                      | Difettacyloxiethyl-hydroxyethylmethylammoniummethosulfat<br>Xi R38<br>Skin Irrit. 2, H315                                                           | 10<20% |
| CAS: 161907-77-3<br>EC number: 310-287-7<br>Reg.nr.: 01-2119475115-41-0000<br>01-2119475115-41-0001<br>01-2119531322-53-0000 | ethanol, 2-butoxy-, manufacture of, by-products from<br>Xi R41<br>Eye Dam. 1, H318                                                                  | 10<20% |
| CAS: 67-63-0<br>EINECS: 200-661-7<br>Index number: 603-117-00-0<br>Reg.nr.: 01-2119457558-25-XXXX                            | propan-2-ol<br>Xi R36; F R11<br>R67<br>Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336                                                      | 1<3%   |

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**  
Take affected persons out of danger area and lay down.  
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.

(Contd. on page 3)

GB

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 25.09.2014

Version number 1

Revision: 25.09.2014

**Trade name:** -EM 902-

(Contd. of page 2)

- **After skin contact:**  
Immediately wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**  
No further relevant information available.
- **Information for doctor:**  
Treat according to symptoms (decontamination, vital functions), no known specific antidote.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
Medical supervision for at least 48 hours.

**SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, 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:  
Nitrogen oxides (NO<sub>x</sub>)
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
Wear self-contained respiratory protective device.
- **Additional information**  
Collect contaminated fire fighting water separately. It must not enter the sewage system.  
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 equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to penetrate the ground/soil.  
In case of seepage into the ground inform responsible authorities.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
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.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.

(Contd. on page 4)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 25.09.2014

Version number 1

Revision: 25.09.2014

**Trade name:** -EM 902-

(Contd. of page 3)

- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**  
Protect from frost.  
The shelf life stated on the label is subject to correct storage of the product.
- **Recommended storage temperature:** Not store under 0 °C - very sensitive to freeze
- **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:**  
**67-63-0 propan-2-ol (1<3%)**  
WEL Short-term value: 1250 mg/m<sup>3</sup>, 500 ppm  
Long-term value: 999 mg/m<sup>3</sup>, 400 ppm
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Do not carry product impregnated cleaning cloths in trouser pockets.  
Immediately remove all soiled and contaminated clothing  
Keep away from foodstuffs, beverages and feed.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.  
Do not eat, drink, smoke or sniff while working.  
Use skin protection cream for skin protection.
- **Respiratory protection:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Recommended filter device for short term use:** Combination filter A-P2
- **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**  
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.  
Nitrile rubber, NBR  
Butyl rubber, BR  
Fluorocarbon rubber (Viton)
- **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:** Tightly sealed goggles

(Contd. on page 5)

GB

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 25.09.2014

Version number 1

Revision: 25.09.2014

Trade name: -EM 902-

(Contd. of page 4)

- **Body protection:**

Choose personal protective equipment according to activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to DIN-EN 465).

### SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

|                  |                 |
|------------------|-----------------|
| Form:            | Fluid           |
| Colour:          | Yellow          |
| Odour:           | Like alcohol    |
| Odour threshold: | Not determined. |

- pH-value at 20 °C: 3.5

- **Change in condition**

|                              |               |
|------------------------------|---------------|
| Melting point/Melting range: | Undetermined. |
| Boiling point/Boiling range: | 100 °C        |

- Flash point: 88 °C (DIN 51 755)

- Flammability (solid, gaseous): Not applicable.

- **Ignition temperature:**

Decomposition temperature: Not determined.

- Self-igniting: Product is not selfigniting.

- Danger of explosion: Product does not present an explosion hazard.

- **Explosion limits:**

|        |                 |
|--------|-----------------|
| Lower: | Not determined. |
| Upper: | Not determined. |

- Vapour pressure: Not determined.

- Density at 20 °C: 0.927 g/cm<sup>3</sup>

- Relative density: Not determined.

- Vapour density: Not determined.

- Evaporation rate: Not determined.

- **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

- Partition coefficient (n-octanol/water): Not determined.

- **Viscosity:**

|            |                 |
|------------|-----------------|
| Dynamic:   | Not determined. |
| Kinematic: | Not determined. |

- **Solvent content:**

|                   |        |
|-------------------|--------|
| Organic solvents: | 1.5 %  |
| VOC (EC)          | 1,50 % |

- **9.2 Other information**

No further relevant information available.

(Contd. on page 6)

GB

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 25.09.2014

Version number 1

Revision: 25.09.2014

Trade name: -EM 902-

(Contd. of page 5)

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **10.3 Possibility of hazardous reactions**  
Develops readily flammable gases/fumes.  
Toxic fumes may be released if heated above the decomposition point.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
None if used correctly.  
Concerning decomposition products in the event of fire, see Chapter 5.

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitisation:** No sensitising effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **Other information:** no data available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **AOX-indication:** The product does not contain organically bonded halogen compounds.
- **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, even in small quantities.  
Danger to drinking water if even small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **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.

(Contd. on page 7)

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 25.09.2014

Version number 1

Revision: 25.09.2014

**Trade name:** -EM 902-

(Contd. of page 6)

Must be specially treated adhering to official regulations.

**Waste disposal key:**

The mentioned waste codes are recommendations based on the product application as suggested by the manufacturer. Special applications and special disposal conditions at the applier's place may however require another waste code.

**Uncleaned packaging:****Recommendation:**

Disposal must be made according to official regulations.

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

**Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

**14.1 UN-Number****ADR, IMDG, IATA**

UN3082

**14.2 UN proper shipping name****ADR**

3082 ENVIRONMENTALLY HAZARDOUS  
SUBSTANCE, LIQUID, N.O.S. (Di-hydrogenated  
tallowfattyalkyl dimethyl ammonium chloride)  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (Dialkyldimethylammonium chloride),  
MARINE POLLUTANT  
ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (Dialkyldimethylammonium chloride)

**IMDG****IATA****14.3 Transport hazard class(es)****ADR****Class**

9 (M6) Miscellaneous dangerous substances and  
articles.

**Label**

9

**IMDG, IATA****Class**

9 Miscellaneous dangerous substances and articles.

**Label**

9

**14.4 Packing group****ADR, IMDG, IATA**

III

**14.5 Environmental hazards:**

Product contains environmentally hazardous  
substances: Dialkyldimethylammonium chloride

**Marine pollutant:**

Yes

**Special marking (ADR):**

Symbol (fish and tree)

**Special marking (IATA):**

Symbol (fish and tree)

**14.6 Special precautions for user**

Symbol (fish and tree)

Warning: Miscellaneous dangerous substances and  
articles.

**Danger code (Kemler):**

90

(Contd. on page 8)

GB

## Safety data sheet

### according to 1907/2006/EC, Article 31

Printing date 25.09.2014

Version number 1

Revision: 25.09.2014

**Trade name:** -EM 902-

(Contd. of page 7)

- **EMS Number:** F-A,S-F
- **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

- **Transport/Additional information:**

- 
- **ADR**
  - **Limited quantities (LQ)** 5L
  - **Transport category** 3
  - **Tunnel restriction code** E
  - **UN "Model Regulation":** UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.  
(Dialkyldimethylammonium chloride), 9, III

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Information about limitation of use:** Employment restrictions concerning juveniles must be observed.
- **Class Share in %**
- **NK** 1<3
- **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**

- H225 Highly flammable liquid and vapour.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H336 May cause drowsiness or dizziness.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- R11 Highly flammable.
- R36 Irritating to eyes.
- R38 Irritating to skin.
- R41 Risk of serious damage to eyes.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R67 Vapours may cause drowsiness and dizziness.

- **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)

(Contd. on page 9)

**Safety data sheet**  
**according to 1907/2006/EC, Article 31**

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Version number 1

Revision: 25.09.2014

**Trade name: -EM 902-**

(Contd. of page 8)

VOC: Volatile Organic Compounds (USA, EU)  
Flam. Liq. 2: Flammable liquids, Hazard Category 2  
Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2  
Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1  
Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2  
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3  
Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1  
Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1  
Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2  
\* **Data compared to the previous version altered.**

GB