

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

Printing date 18.08.2014

Version number 1

Revision: 23.07.2014

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

· 1.1 Product identifier

· Trade name: **-EM 200-**

· Article number: **3.603 / 3.607**

· 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 Neutral cleaner

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

EMSA-Technik

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SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

· Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

· 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:

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Please note, that this product contains Dipotassium tetraborate tetrahydrate.

Whereas Boric acid (CAS-No. 10043-35-3, EC-No. 233-139-2, Index-No. 005-007-00-2) and Disodium tetraborate (CAS-No. 1303-96-4, EG-No. 215-540-4, Index-No. 005-011-01 [CAS-No. and Index-No. refer to the decahydrate]) are listed in Annex I of Directive 67/548/EEC and Annex VI of regulation (EC) No. 1272/2008 and classified as reproductive toxic cat. 2 (Dir. 67/548/EEC) respectively reproductive toxic cat. 1B (Reg. (EC) No. 1272/2008), Dipotassium tetraborate tetrahydrate is not listed in these annexes. Dipotassium tetraborate is also not listed as SVHC – contrary to Boric acid and Disodium tetraborate.

Our supplier does not classify Dipotassium tetraborate as dangerous substance according to Directive 67/548/EEC currently. The entries on the classification and labelling inventory are not consistent. According to the "Registry of current Harmonised Classification and Labelling intentions" Poland proposes to classify Boric acid and Disodium tetraborate as reproductive toxic cat. 3 (Dir. 67/548/EEC) respectively reproductive toxic cat. 2 (Reg. (EC) No. 1272/2008). According to the (German) TRGS 900 there is no need to fear a risk of teratogenic effects, if the occupational exposure limits and biological limit values are observed (note Y). Considering all these inconsistent data we decided to adopt the classification of our supplier.

Please take these discrepancies into account when you establish safety at work instructions. 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



GHS07

Signal word Warning

Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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.

P302+P352 IF ON SKIN: Wash with plenty of water.

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 characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

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· Dangerous components:

CAS: 28098-03-5	octanoic acid, compound with 2- aminoethanol	3-7%
EINECS: 248-838-8	Xn R20/21/22	
	Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	
CAS: 141-43-5	2-aminoethanol	1<3%
EINECS: 205-483-3	C R34; Xn R20/21/22	
Index number: 603-030-00-8	Skin Corr. 1B, H314; Acute Tox. 4, H302; Acute Tox. 4, H312;	
Reg.nr.: 01-2119486455-28-XXXX	Acute Tox. 4, H332	
CAS: 111905-53-4	Fatty alcohol alcoxyated, Polymer	1<3%
Polymer	Xi R36/38; N R50	
	Aquatic Acute 1, H400; Skin Irrit. 2, H315; Eye Irrit. 2, H319;	
	Aquatic Chronic 3, H412	

· Regulation (EC) No 648/2004 on detergents / Labelling for contents

phosphates	5 - 15%
non-ionic surfactants	< 5%

· 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:** Immediately remove any clothing soiled by the product.**· After inhalation:** Supply fresh air; consult doctor in case of complaints.**· After skin contact:**

Rinse with warm water.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, 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

No further relevant information available.

SECTION 5: Firefighting measures**· 5.1 Extinguishing media****· Suitable extinguishing agents:**

Use fire extinguishing methods suitable to surrounding conditions.

The product is not flammable.

· 5.2 Special hazards arising from the substance or mixture

After evaporation of water (in case of a mass fire for example) the following substances may be formed, if heating goes on:

Carbon dioxide (CO₂)

Incomplete combustion may cause Carbon monoxide, toxic fumes and smouldering gases.

Nitrogen oxides (NO_x)

Phosphorus oxides

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- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **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**
Particular danger of slipping on leaked/spilled product.
- **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.
For large amounts: Pump off product.
- **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 precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** The product is not flammable.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
No special requirements.
Store only in the original receptacle.
Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Keep container tightly sealed.
The shelf life stated on the label is subject to correct storage of the product.
- **Recommended storage temperature:** Not store under -12 °C - less 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:**
141-43-5 2-aminoethanol (3-7%)
WEL (Great Britain) Short-term value: 7.6 mg/m³, 3 ppm
Long-term value: 2.5 mg/m³, 1 ppm
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IOELV (EU) Short-term value: 7.6 mg/m³, 3 ppm
 Long-term value: 2.5 mg/m³, 1 ppm
 Skin

• DNELs

141-43-5 2-aminoethanol

Oral DNEL 3.75 mg/kg KG/Tag (general population long-term)

Dermal DNEL 1 mg/kg KG/Tag (worker long-term)

0.24 mg/kg KG/Tag (general population long-term)

0.24 mg/kg (general population long-term)

Inhalative DNEL 3.3 mg/m³ (worker long-term)

2 mg/m³ (general population long-term)

• PNECs

141-43-5 2-aminoethanol

PNEC 0.035 mg/kg Boden (soil)

100 mg/l (sewage treatment plant)

0.0425 mg/kg Sediment (sediment marine water)

0.425 mg/kg Sediment (sediment freshwater)

0.0085 mg/l (water (marine water))

0.085 mg/l (water (freshwater))

0.025 mg/l (water (intermittent releases))

• **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.

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.

• **Respiratory protection:** Not necessary if room is well-ventilated.

• Protection of hands:

Protective gloves

Check protective gloves prior to each use for their proper condition.

For the protection against chemicals in areas with heightened risk of injury (mechanical hazard) no recommendation for a suitable glove material can be given.

To avoid skin problems reduce the wearing of gloves to the required minimum.

• 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

Chloroprene rubber, CR

Natural rubber, NR

• 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:** Safety glasses

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SECTION 9: Physical and chemical properties· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

Form:	Fluid
Colour:	Colourless
	-
	Yellow
	Orange
	Clear

· **Odour:** Characteristic· **pH-value at 20 °C:** 10· **Change in condition**· **Melting point/Melting range:** Undetermined.· **Boiling point/Boiling range:** 100 °C· **Flash point:** Not applicable.· **Self-igniting:** Product is not selfigniting.· **Danger of explosion:** Product does not present an explosion hazard.· **Vapour pressure at 20 °C:** 23 hPa· **Density at 20 °C:** 1.143 g/cm³· **Solubility in / Miscibility with water:** Fully miscible.· **Solvent content:**· **Organic solvents:** 0.0 %· **VOC (EC)** 3,00 %· **9.2 Other Information** No further relevant information available.**SECTION 10: Stability and reactivity**· **10.1 Reactivity**· **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 if handled and stored according to regulations and instructions.

· **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:**· **LD/LC50 values relevant for classification:**

141-43-5 2-aminoethanol

Oral LD 50 1515 mg/kg (rat) (OECD 401)

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Dermal LD 50 2504 mg/kg (rabbit) (OECD 402)

Inhalative LC 50 (6h) > 1.3 mg/l (rat)

111905-53-4 Fatty alcohol alcoxylated, Polymer

Oral LD 50 > 2000 mg/kg (rat)

Primary irritant effect:· **on the skin:** Irritant to skin and mucous membranes.· **on the eye:** Strong irritant with the danger of severe eye injury.· **Sensitization:** No sensitizing 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:****141-43-5 2-aminoethanol**EC 10 (17h) 110 mg/l (*Pseudomonas putida*)EC 20 (0,5h) > 1000 mg/l (*Belebschlamm*) (DIN EN ISO 8192; OECD 209; 88/302/EWG, T.C aquat.)EC 50 (16h) 110 mg/l (*Pseudomonas putida*) (DIN 38412 Teil 8)EC 50 (24h) 140 mg/l (*Daphnia magna*)EC 50 (3h) > 1000 mg/l (*Belebschlamm*) (OECD 209, aquatisch.)EC 50 (48h) (static) 65 mg/l (*Daphnia magna*) (RL 84/449/EWG, C.2)EC 50 (72h) 2.5 mg/l (*Pseudokirchneriella subcapitata*)22 mg/l (*Scenedesmus subspicatus*) (Richtlinie 92/69/EWG, C.3)2.5 mg/l (*Selenastrum capricornutum*) (OECD 201)LC 50 (96h) (static) 170 mg/l (*Carassius auratus*) (APHA 1971)349 mg/l (*Cyprinus carpio*) (RL 92/69/EWG, C.1, semistatisch)125 mg/l (*Elritze*)150 mg/l (*Oncorhynchus mykiss*)LOEC (30d) 3.6 mg/l (*Oryzias latipes*)NOEC (21d) 0.85 mg/l (*Daphnia magna*) (OECD 211)NOEC (30d) 1.2 mg/l (*Oryzias latipes*) (OECD 210)NOEC (72h) 1 mg/l (*Selenastrum capricornutum*) (OECD 201)**111905-53-4 Fatty alcohol alcoxylated, Polymer**

EC 50 (48h) >0.1-<1 mg/l (aquatische Invertebraten)

EC 50 (72h) >0.1-<1 mg/l (Was)

LC 50 (48h) >1-<10 mg/l (*Leuciscus idus*)

NOEC >0.1-<1 mg/l (aquatische Invertebraten)

· **12.2 Persistence and degradability** The organic portion of the product is biodegradable.**Biodegradability****141-43-5 2-aminoethanol**

Biolog. Abbaubarkeit (21d) >90 % (OECD 301 A) (OECD 301 A)

94 % (OECD 301 E)

(28d) 90 - 100 % (OECD 301 F)

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111905-53-4 Fatty alcohol alcoxylated, Polymer

Biolog. Abbaubarkeit > 60 % (OECD 301 B) (OECD 301 B; ISO9439; 92/69/EWG, C.4-C)
> 90 % (OECD 303 A) (OECD 303 A)

- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow product to reach ground water, water course or sewage system.
- **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 be specially treated adhering to official regulations.
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **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.
- **European waste catalogue**
12 03 01 aqueous washing liquids
- **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, ADN, IMDG, IATA** Void
- **14.2 UN proper shipping name**
- **ADR, ADN, IMDG, IATA** Void
- **14.3 Transport hazard class(es)**
- **ADR, ADN, IMDG, IATA**
- **Class** Void
- **14.4 Packing group**
- **ADR, 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 MARPOL73/78 and the IBC Code** Not applicable.
- **Transport/Additional information:** Not dangerous according to the above specifications.
- **UN "Model Regulation":** -

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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 %**
- **I 3-7**
- **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.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H400 Very toxic to aquatic life.
- H412 Harmful to aquatic life with long lasting effects.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

- R34 Causes burns.
- R36/38 Irritating to eyes and skin.
- R50 Very toxic to aquatic organisms.

· 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 Harmonized 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)
- VOC: Volatile Organic Compounds (USA, EU)
- DNEL: Derived No-Effect Level (REACH)
- PNEC: Predicted No-Effect Concentration (REACH)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
- Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1
- Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

- *** Data compared to the previous version altered.**

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