

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 14.10.2014

Version number 1

Revision: 14.10.2014

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

- 1.1 Product identifier
- Trade name: **-EM 74-**
- Article number: **3.601 / 3.605**
- 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 Degreaser
- 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
Met. Corr.1 H290 May be corrosive to metals.
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
STOT SE 3 H335 May cause respiratory irritation.
- Classification according to Directive 67/548/EEC or Directive 1999/45/EC
C; Corrosive
R35: Causes severe burns.
Xi; Irritant
R37: Irritating to respiratory system.
- 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.

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· **Hazard pictograms**

GHS05 GHS07

· **Signal word** Danger· **Hazard-determining components of labelling:**disodium metasilicate x 5 H₂O

sodium hydroxide

· **Hazard statements**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

· **Precautionary statements**

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

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P406 Store in corrosive resistant container with a resistant inner liner.

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: 497-19-8	sodium carbonate	25-50%
EINECS: 207-838-8	Xi R36	
Index number: 011-005-00-2	Eye Irrit. 2, H319	
Reg.nr.: 01-2119485498-19-XXXX		
CAS: 10213-79-3	disodium metasilicate x 5 H ₂ O	25-50%
EINECS: 229-912-9	C R34; Xi R37	
Index number: 014-010-00-8	Skin Corr. 1B, H314; STOT SE 3, H335	
Reg.nr.: 01-2119449811-37-XXXX		
CAS: 1310-73-2	sodium hydroxide	10-25%
EINECS: 215-185-5	C R35	
Index number: 011-002-00-6	Met. Corr. 1, H290; Skin Corr. 1A, H314	
Reg.nr.: 01-2119457892-27-XXXX		
CAS: 68439-51-0	Alcohol, C12-C14, ethoxylated/propoxylated	<1%
Polymer	N R50	
	Aquatic Acute 1, H400	

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· **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 or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Seek medical treatment.

· **After eye contact:**

Rinse opened eye for several minutes under running water.

Protect unharmed eye.

Call a doctor immediately.

· **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:**

The product is not flammable.

Use fire extinguishing methods suitable to surrounding conditions.

· **5.2 Special hazards arising from the substance or mixture**

In case of fire, the following can be released:

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

Carbon dioxide (CO₂)

Phosphorus oxides

· **5.3 Advice for firefighters**

· **Protective equipment:**

Wear fully protective suit.

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**

Wear protective equipment. Keep unprotected persons away.

Avoid formation of dust.

Use respiratory protective device against the effects of fumes/dust/aerosol.

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- **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:**

Dispose contaminated material as waste according to item 13.
 Pick up mechanically.
 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**

Any unavoidable deposit of dust must be regularly removed.
 Thorough dedusting.
 Prevent formation of dust.

- **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:**

Unsuitable material for receptacle: aluminium.
 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:**

Store in dry conditions.
 Protect from humidity and water.
 Keep container tightly sealed.
 The shelf life stated on the label is subject to correct storage of the product.

- **Recommended storage temperature:** non-sensitive

- **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:**

1310-73-2 sodium hydroxide (10-25%)

WEL Short-term value: 2 mg/m³

- **DNELs**

497-19-8 sodium carbonate

Inhalative DNEL 10 mg/m³ (worker long-term)

10213-79-3 disodium metasilicate x 5 H₂O

Oral DNEL 0.74 mg/kg KG/Tag (general population long-term)

Dermal DNEL 1.49 mg/kg KG/Tag (worker long-term)

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

> 5000 mg/kg (rat)

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Inhalative DNEL 6.22 mg/m³ (worker long-term)1.55 mg/m³ (general population long-term)**1310-73-2 sodium hydroxide**Inhalative DNEL 1 mg/m³ (worker long-term)1 mg/m³ (general population long-term)· **Additional information:** The lists valid during the making were used as basis.· **8.2 Exposure controls**· **Personal protective equipment:**· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

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:**

In case of dust formation use respirator (P2).

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**

Protective gloves

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. 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:** Gauze goggles· **Body protection:** Protective work clothing**SECTION 9: Physical and chemical properties**· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:****Form:** Powder**Colour:** White

-

Yellowish

· **Odour:** Odourless· **pH-value:** 12,5 (10g/l)· **Change in condition****Melting point/Melting range:** Undetermined.**Boiling point/Boiling range:** Undetermined.· **Flash point:** Not applicable.

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- **Self-igniting:** Product is not selfigniting.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Density:** Not determined.
- **Bulk density:** 1000 kg/m³
- **Solubility in / Miscibility with water:** Soluble.
- **Solvent content:**
 - Organic solvents:** 0.0 %
 - VOC (EC)** 0,00 %
- **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 and stored according to specifications.
- **10.3 Possibility of hazardous reactions**
Reacts with acids.
Heating occurs when water is added.
Reacts with light alloys in the presence of moisture to form hydrogen.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:**
Acids
Reacts with base metals as aluminium.
- **10.6 Hazardous decomposition products:**
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:**

497-19-8 sodium carbonate

Oral	LD 50	2800 mg/kg (rat)
Dermal	LD 50	>2000 mg/kg (rabbit)
Inhalative	LC 50 (2h)	0.8 mg/l (Meerschweinchen)
		1.2 mg/l (mouse)
		2.3 mg/l (rat) (OECD 403)
- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitisation:** No sensitising effects known.
- **Subacute to chronic toxicity:**

10213-79-3 disodium metasilicate x 5 H₂O

Oral	NOAEL	260 mg/kg (mouse)
		227 mg/kg (rat)

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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:

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity:****497-19-8 sodium carbonate**

EC 50 (48h) 200 - 227 mg/l (Ceriodaphnia dubia)

EC 50 (96h) 265 mg/l (Daphnia magna)

300 mg/l (Lepomis macrochirus)

10213-79-3 disodium metasilicate x 5 H₂O

EC 50 (72h) 345.4 mg/l (Scenedesmus subspicatus)

LC 50 (96h) 210 mg/l (Brachydanio rerio)

1310-73-2 sodium hydroxide

EC 50 (0,25h) 22 mg/l (Photobacterium phosphoreum)

EC 50 (24h) 76.0 mg/l (Daphnia magna)

EC 50 (48h) 40.4 mg/l (Ceriodaphnia sp.)

LC 50 (24h) 145 mg/l (Poecilia reticulata)

LC 50 (48h) 99 mg/l (Lepomis macrochirus)

133 mg/l (Leuciscus idus)

LC 50 (96h) 125 mg/l (Gambusia affinis)

45.5 mg/l (Oncorhynchus mykiss)

• **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.

Additional ecological information:

• **AOX-indication:** The product does not contain organically bonded halogen compounds.

General notes:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

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.

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· **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

16 03 03 inorganic wastes containing dangerous substances

· **Uncleaned packaging:**

· **Recommendation:**

Disposal must be made according to official regulations.

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

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA**

UN3262

· **14.2 UN proper shipping name**

· **ADR**

3262 CORROSIVE SOLID, BASIC, INORGANIC,
N.O.S. (SODIUM HYDROXIDE, DISODIUM
TRIOXOSILICATE)

· **IMDG, IATA**

CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.
(SODIUM HYDROXIDE, DISODIUM
TRIOXOSILICATE)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

8 (C6) Corrosive substances.

· **Label**

8

· **IMDG, IATA**



· **Class**

8 Corrosive substances.

· **Label**

8

· **14.4 Packing group**

· **ADR, IMDG, IATA**

II

· **14.5 Environmental hazards:**

· **Marine pollutant:**

No

· **14.6 Special precautions for user**

Warning: Corrosive substances.

· **Danger code (Kemler):**

80

· **EMS Number:**

F-A,S-B

· **Segregation groups**

Alkalis

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Not applicable.

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· Transport/Additional information:

· ADR

· Limited quantities (LQ)

1 kg

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· Transport category

2

· Tunnel restriction code

E

· IMDG

· Limited quantities (LQ)

1 kg

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 g

Maximum net quantity per outer packaging: 500 g

· UN "Model Regulation":

UN3262, CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, DISODIUM TRIOXOSILICATE), 8, II

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.

· **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

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

R34 Causes burns.

R35 Causes severe burns.

R36 Irritating to eyes.

R37 Irritating to respiratory system.

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 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)

VOC: Volatile Organic Compounds (USA, EU)

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DNEL: Derived No-Effect Level (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Met. Corr. 1: Corrosive to metals, Hazard Category 1
Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A
Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
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 - Acute Hazard, Category 1
*** Data compared to the previous version altered.**

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