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

1.1. Product identifier

EM-080

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

Use of the substance/mixture

Cleaning agent. Universal cleaner, with corrosion protection, for the ultrasonic bath, concentrate.

1.3. Details of the supplier of the safety data sheet

Company name:	EMAG AG
Street:	Gerauer Straße 34
Place:	64546 Mörfelden-Walldorf, GERMANY
Telephone:	+49 (0) 6105 406 80
e-mail:	info@emag-germany.de
Internet:	www.emag-germany.de

1.4. Emergency telephone number:

24-hours-emergency: Giftnotruf Berlin: +49 30 30686790 (german, english)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Indications of danger: Xi - Irritant

R phrases:

Irritating to eyes and skin.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes skin irritation.

Causes serious eye damage.

2.2. Label elements

Hazardous components which must be listed on the label

Phosphoric acid ester, sodium-salt

Disodium metasilicate pentahydrat

Signal word: Danger

Pictograms: GHS05

Hazard statements

H315	Causes skin irritation.
H318	Causes serious eye damage.

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.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
213-791-2	Water	70-80 %
7732-18-5		
230-785-7	Tetrapotassium pyrophosphate	<9,0 %
7320-34-5		
	Phosphoric acid ester, sodium-salt	<8,0 %
111798-26-6	Xi - Irritant R38-41	
	Skin Irrit. 2, Eye Dam. 1; H315 H318	
257-573-7	N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt	<6,0 %
51981-21-6		
229-912-9	Disodium metasilicate pentahydrat	<4,0 %
10213-79-3	C - Corrosive, Xi - Irritant R34-37	
	Skin Corr. 1B, STOT SE 3; H314 H335	
268-938-5	C8-C18 Aminoxides	<1,0 %
68155-09-9	Xi - Irritant R38-41-52	
	Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 3; H315 H318 H412	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Change contaminated clothing.

After inhalation

In case of inhaling spray mists, consult a doctor .

After contact with skin

After contact with skin, wash immediately with plenty of Water and soap.

After contact with eyes

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. In case of troubles or persistent symptoms, consult an opthalmologist.

After ingestion

Rinse mouth immediately and drink large quantities of water. Do not induce vomiting. Consult physician.

4.2. Most important symptoms and effects, both acute and delayed

No symptoms known up to now.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water. Foam. Atomized water.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Can be released in case of fire: Nitrogen oxides (NOx). Carbon dioxide (CO_2).

5.3. Advice for firefighters

Protective clothing.

Additional information

Material is not combustible. Extinguishing materials should be selected according to the surrounding area.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

6.2. Environmental precautions

Do not empty into drains or the aquatic environment.

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the assimilated material according to the section on waste disposal .

6.4. Reference to other sections

See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

No special technical protective measures are necessary.

Advice on protection against fire and explosion

Product is not: Oxidizing. Flammable. explosive.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store only in original container. Keep away from food, drink and animal feedingstuffs.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls

Refer to chapter 7. No further action is necessary.

Protective and hygiene measures

Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and at the end of work.

Eye/face protection

Wear eye/face protection.

Hand protection

Suitable material: PE (polyethylene). CR (polychloroprenes, Chloroprene rubber). NBR (Nitrile rubber). Butyl rubber. FKM (Fluoroelastomer (Viton)).

Tested protective gloves are to be worn: EN 374

Skin protection

Skin protection: not required.

Respiratory protection

Respiratory protection not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless - light yellow
Odour:	characteristic

			Test method
pH-Value (at 20 °C):	12,9 (conc.)	9,9 (1 %)	DGF H-III 1
Changes in the physical state			
Melting point:		-6 °C	
Initial boiling point and boiling range:		>100 °C	
Flash point:		---	

Explosive properties

not Explosive.

Oxidizing properties

not oxidizing.

Density (at 20 °C):	1,12 g/cm³	DIN 12791
Water solubility:	complete miscible	

SECTION 10: Stability and reactivity

10.1. Reactivity

Exothermic reactions with: acid, concentrated.

10.2. Chemical stability

The product is chemically stable under normal ambient conditions.

10.3. Possibility of hazardous reactions

None, in case of proper use.

10.4. Conditions to avoid

Thermal decomposition can lead to the escape of irritating gases and vapors.

10.5. Incompatible materials

acid, concentrated.

10.6. Hazardous decomposition products

None, in case of proper use.

Further information

Do not mix with other products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
7320-34-5	Tetrapotassium pyrophosphate				
	oral	LD50	>2000 mg/kg	Maus	
111798-26-6	Phosphoric acid ester, sodium-salt				
	oral	LD50	>2000 mg/kg	Ratte	
51981-21-6	N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt				
	oral	LD50	>2000 mg/kg		EC B.1
	dermal	LD50	>2000 mg/kg		OECD 402
	inhalative (4 h) vapour	LC50	4,2 mg/l		OECD 403
68155-09-9	C8-C18 Aminoxides				
	oral	LD50	6000 mg/kg	Ratte	

Irritation and corrosivity

Risk of serious damage to eyes.

Irritant effect on the skin: irritant.

Sensitising effects

no danger of sensitization.

SECTION 12: Ecological information

12.1. Toxicity

Technically correct releases of minimal concentrations to adapted biological sewage treatment facility , will not disturb the biodegradability of activated sludge. due to the alkaline character of the product, usually, it has to be neutralized before contaminated effluents are introduced into the waste water treatment system.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] | [d]	Species	Source
111798-26-6	Phosphoric acid ester, sodium-salt					
	Acute fish toxicity	LC50	>10 mg/l	96 h		
51981-21-6	N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt					
	Acute fish toxicity	LC50	>100 mg/l	96 h	Oncorhynchus mykiss	OECD 203
	Acute algae toxicity	ErC50	>100 mg/l	72 h	Desmodesmus subspicatus	OECD 201
	Acute crustacea toxicity	EC50	>100 mg/l	48 h	Daphnien	OECD 202
	Acute bacteria toxicity	--- g O2/g (--- mg/l)				OECD 209
68155-09-9	C8-C18 Aminoxides					
	Acute fish toxicity	LC50	5,9 mg/l	96 h		
	Acute algae toxicity	ErC50	110 mg/l			

12.2. Persistence and degradability

The surfactants contained in this preparation 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.

12.3. Bioaccumulative potential

On the basis of existing data about disposal/decomposition and bio-accumulation potential, long term environmental damage is unlikely.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
51981-21-6	N,N-bis(carboxylatomethyl)-L-glutamate, Sodium salt	<0

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

not applicable

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

Contaminated packaging

Contaminated packing must be completely emptied and can be re-used following appropriate cleaning.

SECTION 14: Transport information

Other applicable information

Not a hazardous material with respect to transportation regulations.

SECTION 15: Regulatory information

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

EU regulatory information

2004/42/EC (VOC): 0 % (0g/l)

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Data changed from previous versions: 2, 8, 11, 12, 15, 16

Relevant R-phrases (Number and full text)

34	Causes burns.
37	Irritating to respiratory system.
38	Irritating to skin.
41	Risk of serious damage to eyes.
52	Harmful to aquatic organisms.

Relevant H- and EUH-phrases (Number and full text)

H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

Further Information

Training instructions: Notice the directions for use on the label.

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)