

EM-300 Metal cleaner

SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2015/830)

SECTION 1 : IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name : EM-300 Metal cleaner
UFI : 4JA0-G0YE-W008-H94N

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

Precision Cleaning for Ultrasonic processes. Removing of polishing compounds.

1.3. Details of the supplier of the safety data sheet

Registered company name : EMAG AG
Address : Gerauer Str. 34 64546 Mörfelden-Walldorf
Telephone : +49(0) 6105 406 700 Fax : +49(0) 6105 406 750
info@emag-germany.de
www.emag-germany.de

1.4. Emergency telephone number :

Emergency number for Germany : Giftnotzentrale Bonn - +49(0) 228 19240

SECTION 2 : HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

In compliance with EC regulation No. 1272/2008 and its amendments.

Skin corrosion, Category 1B (Skin Corr. 1B, H314).
Serious eye damage, Category 1 (Eye Dam. 1, H318).
Reproductive toxicity, Category 2 (Repr. 2, H361fd).
Hazardous to the aquatic environment - Chronic hazard, Category 3 (Aquatic Chronic 3, H412).
This mixture does not present a physical hazard. Refer to the recommendations regarding the other products present on the site.

2.2. Label elements

In compliance with EC regulation No. 1272/2008 and its amendments.

Hazard pictograms :



GHS05



GHS08

Signal Word :

DANGER

Product identifiers :

EC 931-329-6	AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD., N,N-BIS(HYDROXYETHYL)
EC 205-483-3	2-AMINOETHANOL
EC 203-868-0	2,2'-IMINODIETHANOL

Hazard statements :

H314	Causes severe skin burns and eye damage.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements - Prevention :

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.

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P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves
Precautionary statements - Response :	
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or 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.
P310	Immediately call a POISON CENTER/doctor.
P363	Wash contaminated clothing before reuse.
Precautionary statements - Storage :	
P401	Store in accordance with the local regulation
Precautionary statements - Disposal :	
P501	Dispose of contents/container in accordance with local regulation

2.3. Other hazards

The mixture does not contain substances classified as 'Substances of Very High Concern' (SVHC) $\geq 0.1\%$ published by the European Chemicals Agency (ECHA) under article 57 of REACH: <http://echa.europa.eu/fr/candidate-list-table>

The mixture fulfils neither the PBT nor the vPvB criteria for mixtures in accordance with annexe XIII of the REACH regulations EC 1907/2006.

SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Composition :

Identification	(EC) 1272/2008	Note	%
INDEX: 0371 EC: 931-329-6 REACH: 01-2119490100-53-0041 AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD., N,N-BIS(HYDROXYETHYL)	GHS05, GHS09 Dgr Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411		10 \leq x % < 25
INDEX: 603_030_00_8 CAS: 141-43-5 EC: 205-483-3 REACH: 01-2119486455-28 2-AMINOETHANOL	GHS07, GHS05 Dgr Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1B, H314 Acute Tox. 4, H332 STOT SE 3, H335 Aquatic Chronic 3, H412	[1]	10 \leq x % < 25
INDEX: 603_071_001B CAS: 111-42-2 EC: 203-868-0 REACH: 01-2119488930-28-XXXX 2,2'-IMINODIETHANOL	GHS08, GHS07, GHS05 Dgr Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361fd STOT RE 2, H373	[1] [2]	2.5 \leq x % < 10
INDEX: 0120 CAS: 139-89-9 EC: 205-381-9 REACH: 01-2119972845-22 HYDROXYETHYLETHYLENDIAMINTRIACETIC ACID, TRISODIUMSALT	GHS07, GHS05 Dgr Acute Tox. 4, H302 Eye Dam. 1, H318		2.5 \leq x % < 10

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INDEX: 0016 CAS: 68131-40-8 EC: 614-295-4 REACH: 01-2119560577-29-0000 ETHOXYLATED ALCOHOL SECONDARY C11-15	GHS07, GHS05 Dgr Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Acute Tox. 4, H332		1 ≤ x % < 2.5
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(Full text of H-phrases: see section 16)

Information on ingredients :

- [1] Substance for which maximum workplace exposure limits are available.
[2] Carcinogenic, mutagenic or reprotoxic (CMR) substance.

SECTION 4 : FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing by an unconscious person.

4.1. Description of first aid measures
In the event of splashes or contact with eyes :

Wash thoroughly with fresh, clean water for 15 minutes holding the eyelids open.
Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.

In the event of splashes or contact with skin :

Remove any soiled or splashed clothing immediately.
If the contaminated area is widespread and/or there is damage to the skin, a doctor must be consulted or the patient transferred to hospital.
-Watch out for any remaining product between skin and clothing, watches, shoes, etc.

In the event of swallowing :

Do not give the patient anything orally.
In the event of swallowing, if the quantity is small (no more than one mouthful), rinse the mouth with water and consult a doctor.
Keep the person exposed at rest. Do not force vomiting.
Seek medical attention immediately, showing the label.
If swallowed accidentally, call a doctor to ascertain whether observation and hospital care will be necessary. Show the label.

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

No data available.

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

No data available.

SECTION 5 : FIREFIGHTING MEASURES

Non-flammable.

5.1. Extinguishing media
Suitable methods of extinction

- In the event of a fire, use :
- sprayed water or water mist
 - foam
 - multipurpose ABC powder
 - BC powder
 - carbon dioxide (CO₂)

Unsuitable methods of extinction

- In the event of a fire, do not use :
- water jet

EM-300 Metal cleaner**5.2. Special hazards arising from the substance or mixture**

A fire will often produce a thick black smoke. Exposure to decomposition products may be hazardous to health.

Do not breathe in smoke.

In the event of a fire, the following may be formed :

- carbon monoxide (CO)
- carbon dioxide (CO₂)
- nitrogen oxide (NO)
- nitrogen dioxide (NO₂)

5.3. Advice for firefighters

No data available.

SECTION 6 : ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Consult the safety measures listed under headings 7 and 8.

For non first aid worker

Avoid any contact with the skin and eyes.

For first aid worker

First aid workers will be equipped with suitable personal protective equipment (See section 8).

6.2. Environmental precautions

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, earth, vermiculite, diatomaceous earth in drums for waste disposal.

Prevent any material from entering drains or waterways.

6.3. Methods and material for containment and cleaning up

Neutralise with an acidic decontaminant.

Clean preferably with a detergent, do not use solvents.

6.4. Reference to other sections

No data available.

SECTION 7 : HANDLING AND STORAGE

Requirements relating to storage premises apply to all facilities where the mixture is handled.

Avoid exposure to pregnant women and warn women of child-bearing age of the possible risks

7.1. Precautions for safe handling

Always wash hands after handling.

Remove and wash contaminated clothing before re-using.

Ensure that there is adequate ventilation, especially in confined areas.

Emergency showers and eye wash stations will be required in facilities where the mixture is handled constantly.

Fire prevention :

Handle in well-ventilated areas.

Prevent access by unauthorised personnel.

Recommended equipment and procedures :

For personal protection, see section 8.

Observe precautions stated on label and also industrial safety regulations.

Avoid exposure - obtain special instructions before use.

Packages which have been opened must be reclosed carefully and stored in an upright position.

Prohibited equipment and procedures :

No smoking, eating or drinking in areas where the mixture is used.

7.2. Conditions for safe storage, including any incompatibilities

Stock between 5 °C and 40°C in a dry, well ventilated place

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Storage

Keep the container tightly closed in a dry, well-ventilated place.

The floor must be impermeable and form a collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

Packaging

Always keep in packaging made of an identical material to the original.

7.3. Specific end use(s)

No data available.

SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION
8.1. Control parameters
Occupational exposure limits :

- European Union (2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m ³	VME-ppm	VLE-mg/m ³	VLE-ppm	Notes
141-43-5	2.5	1	7.6	3	Peau

- ACGIH TLV (American Conference of Governmental Industrial Hygienists, Threshold Limit Values, 2010) :

CAS	TWA	STEL	Ceiling	Definition	Criteria
141-43-5	3 ppm	6 ppm			
111-42-2	1 (IFV) mg/m ³			Skin; A3	

- Germany - AGW (BAuA - TRGS 900, 08/08/2019) :

CAS	VME	VME	Excess	Notes
141-43-5		0.2 ppm 0.5 mg/m ³		1(I)
111-42-2		0.11 ppm 0.5 mg/m ³		1 (I)

- China (GBZ 2.1, 2007) :

CAS	TWA	STEL	Anm	TWA	STEL	Anm
141-43-5	8 mg/m ³	15 mg/m ³				

- France (INRS - ED984 / 2019-1487) :

CAS	VME-ppm	VME-mg/m ³	VLE-ppm	VLE-mg/m ³	Notes	TMP No
141-43-5	1	2.5	3	7.6	-	49. 49 Bis
111-42-2	3	15	-	-	-	49.49 Bis

- UK / WEL (Workplace exposure limits, EH40/2005, 2011) :

CAS	TWA	STEL	Ceiling	Definition	Criteria
141-43-5	1 ppm 2.5 mg/m ³	3 ppm 7.6 mg/m ³		Sk	

Derived no effect level (DNEL) or derived minimum effect level (DMEL):

HYDROXYETHYLETHYLENDIAMINTRIACETIC ACID, TRISODIUMSALT (CAS: 139-89-9)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Inhalation.
Long term local effects.
10 mg of substance/m³

2,2'-IMINODIETHANOL (CAS: 111-42-2)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
0.13 mg/kg body weight/day

Exposure method:
Potential health effects:

Inhalation.
Long term local effects.

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DNEL : 0.5 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 0.75 mg of substance/m3

Final use:

Exposure method: **Consumers.**
Ingestion.
Potential health effects: Long term systemic effects.
DNEL : 0.06 mg/kg body weight/day

Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 0.07 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term local effects.
DNEL : 0.125 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 0.125 mg of substance/m3

2-AMINOETHANOL (CAS: 141-43-5)

Final use:

Exposure method: **Workers.**
Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 1 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 3.3 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Long term local effects.
DNEL : 3.3 mg of substance/m3

Final use:

Exposure method: **Consumers.**
Ingestion.
Potential health effects: Long term systemic effects.
DNEL : 3.75 mg/kg body weight/day

Exposure method: Dermal contact.
Potential health effects: Long term systemic effects.
DNEL : 0.24 mg/kg body weight/day

Exposure method: Inhalation.
Potential health effects: Long term systemic effects.
DNEL : 2 mg of substance/m3

Exposure method: Inhalation.
Potential health effects: Long term local effects.
DNEL : 2 mg of substance/m3

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AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD., N,N-BIS(HYDROXYETHYL)

Final use:

Exposure method:
Potential health effects:
DNEL :

Workers.

Dermal contact.
Long term systemic effects.
4.16 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
73.4 mg of substance/m3

Final use:

Exposure method:
Potential health effects:
DNEL :

Consumers.

Ingestion.
Long term systemic effects.
6.25 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Dermal contact.
Long term systemic effects.
2.5 mg/kg body weight/day

Exposure method:
Potential health effects:
DNEL :

Inhalation.
Long term systemic effects.
21.73 mg of substance/m3

Predicted no effect concentration (PNEC):

HYDROXYETHYLETHYLENDIAMINTRIACETIC ACID, TRISODIUMSALT (CAS: 139-89-9)

Environmental compartment:
PNEC :

Fresh water.
2.5 mg/l

Environmental compartment:
PNEC :

Sea water.
0.25 mg/l

Environmental compartment:
PNEC :

Intermittent waste water.
50 mg/l

2,2'-IMINODIETHANOL (CAS: 111-42-2)

Environmental compartment:
PNEC :

Soil.
1.63 mg/kg

Environmental compartment:
PNEC :

Fresh water.
0.02 mg/l

Environmental compartment:
PNEC :

Sea water.
0.002 mg/l

Environmental compartment:
PNEC :

Intermittent waste water.
0.095 mg/l

Environmental compartment:
PNEC :

Fresh water sediment.
0.092 mg/kg

Environmental compartment:
PNEC :

Marine sediment.
0.0092 mg/kg

Environmental compartment:

Waste water treatment plant.

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PNEC : 100 mg/l

2-AMINOETHANOL (CAS: 141-43-5)

Environmental compartment: Soil.
PNEC : 1.29 mg/kg

Environmental compartment: Fresh water.
PNEC : 0.07 mg/l

Environmental compartment: Sea water.
PNEC : 0.007 mg/l

Environmental compartment: Intermittent waste water.
PNEC : 0.028 mg/l

Environmental compartment: Fresh water sediment.
PNEC : 0.357 mg/kg

Environmental compartment: Marine sediment.
PNEC : 0.0357 mg/kg

Environmental compartment: Waste water treatment plant.
PNEC : 100 mg/l

AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD., N,N-BIS(HYDROXYETHYL)

Environmental compartment: Soil.
PNEC : 35 µg/kg

Environmental compartment: Fresh water.
PNEC : 7 µg/l

Environmental compartment: Sea water.
PNEC : 0.7 µg/l

Environmental compartment: Intermittent waste water.
PNEC : 24 µg/l

Environmental compartment: Fresh water sediment.
PNEC : 0.195 mg/kg

Environmental compartment: Marine sediment.
PNEC : 0.019 mg/kg

Environmental compartment: Waste water treatment plant.
PNEC : 830 mg/l

8.2. Exposure controls
Personal protection measures, such as personal protective equipment

Use personal protective equipment that is clean and has been properly maintained.

Store personal protective equipment in a clean place, away from the work area.

Never eat, drink or smoke during use. Remove and wash contaminated clothing before re-using. Ensure that there is adequate ventilation, especially in confined areas.

EM-300 Metal cleaner**- Eye / face protection**

Avoid contact with eyes.

Use eye protectors designed to protect against liquid splashes

Before handling, wear safety goggles with protective sides accordance with standard EN166.

In the event of high danger, protect the face with a face shield.

Prescription glasses are not considered as protection.

Individuals wearing contact lenses should wear prescription glasses during work where they may be exposed to irritant vapours.

Provide eyewash stations in facilities where the product is handled constantly.

- Hand protection

Use suitable protective gloves that are resistant to chemical agents in accordance with standard EN ISO 374-1.

Gloves must be selected according to the application and duration of use at the workstation.

Protective gloves need to be selected according to their suitability for the workstation in question : other chemical products that may be handled, necessary physical protections (cutting, pricking, heat protection), level of dexterity required.

Type of gloves recommended :

- Butyl Rubber (Isobutylene-isoprene copolymer)

- Nitrile rubber (butadiene-acrylonitrile copolymer rubber (NBR))

Recommended properties :

- Impervious gloves in accordance with standard EN ISO 374-2

- Body protection

Avoid skin contact.

Wear suitable protective clothing.

Suitable type of protective clothing :

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605/A1 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034/A1 to prevent skin contact.

Wear suitable protective clothing and, in particular, an apron and boots. These items of clothing shall be maintained in good condition and cleaned after use.

In the event of substantial spatter, wear liquid-tight protective clothing against chemical risks (type 3) in accordance with EN14605 to prevent skin contact.

In the event of a risk of splashing, wear protective clothing against chemical risks (type 6) in accordance with EN13034 to prevent skin contact.

Suitable type of protective boots :

In the event of minor spatter, wear protective boots or half-boots against chemical risks in accordance with standard EN13832-2.

In the event of prolonged contact, wear boots or half-boots with liquid-chemical-resistant and waterproof soles and uppers in accordance with standard EN13832-3.

Work clothing worn by personnel shall be laundered regularly.

After contact with the product, all parts of the body that have been soiled must be washed.

- Respiratory protection

Anti-gas and vapour filter(s) (Combined filters) in accordance with standard EN14387 :

- A1 (Brown)

SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties****General information :**

Physical state :

Viscous liquid.

Color:

yellow/orange

Odour:

caracteristic

EM-300 Metal cleaner**Important health, safety and environmental information**

pH :	10.80 . Slightly basic.
pH (aqueous solution) :	10.10
Boiling point/boiling range :	Not specified.
Flash point interval :	Not relevant.
Vapour pressure (50°C) :	Not relevant.
Density :	1.025
Miscibility :	100%
Water solubility :	Dilutable.
Melting point/melting range :	Not specified.
Self-ignition temperature :	Not specified.
Decomposition point/decomposition range :	Not specified.
% VOC :	< 3%

9.2. Other information

VOC (g/l) :

SECTION 10 : STABILITY AND REACTIVITY**10.1. Reactivity**

No data available.

10.2. Chemical stability

This mixture is stable under the recommended handling and storage conditions in section 7.

10.3. Possibility of hazardous reactions

When exposed to high temperatures, the mixture can release hazardous decomposition products, such as carbon monoxide and dioxide, fumes and nitrogen oxide.

10.4. Conditions to avoid

No data available.

10.5. Incompatible materials

Keep away from :

- acids

10.6. Hazardous decomposition products

The thermal decomposition may release/form :

- carbon monoxide (CO)

- carbon dioxide (CO₂)

- nitrogen oxide (NO)

- nitrogen dioxide (NO₂)**SECTION 11 : TOXICOLOGICAL INFORMATION****11.1. Information on toxicological effects**

Exposure to vapours from solvents in the mixture in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

May cause irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis, following exposure between three minutes and one hour.

Corrosive reactions are typified by ulcers, bleeding, bloody scabs, and, by the end of observation at 14 days, by discolouration due to blanching of the skin, complete areas of alopecia, and scars.

Repeated or prolonged contact with the mixture may cause removal of natural oil from the skin resulting in non-allergic contact dermatitis and absorption through the skin.

Suspected human reproductive toxicant.

Suspected of damaging fertility and the unborn child.

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11.1.1. Substances

Acute toxicity :

HYDROXYETHYLETHYLENDIAMINTRIACETIC ACID, TRISODIUMSALT (CAS: 139-89-9)

Oral route : LD50 = 1612 mg/kg
Species : Rat
OECD Guideline 401 (Acute Oral Toxicity)

Inhalation route (Dusts/mist) : LC50 > 3.95
Species : Rat
OECD Guideline 403 (Acute Inhalation Toxicity)

2,2'-IMINODIETHANOL (CAS: 111-42-2)

Oral route : LD50 = 1600 mg/kg
Species : Rat
OECD Guideline 401 (Acute Oral Toxicity)

Dermal route : LD50 = 13079 mg/kg
Species : Rabbit

AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD., N,N-BIS(HYDROXYETHYL)

Oral route : LD50 > 2000 mg/kg
Species : Rat

Dermal route : LD50 > 2000
Species : Rabbit

Skin corrosion/skin irritation :

HYDROXYETHYLETHYLENDIAMINTRIACETIC ACID, TRISODIUMSALT (CAS: 139-89-9)

Species : Rabbit
OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Respiratory or skin sensitisation :

HYDROXYETHYLETHYLENDIAMINTRIACETIC ACID, TRISODIUMSALT (CAS: 139-89-9)

Guinea Pig Maximisation Test (GMPT) : Non-sensitiser.
Species : Guinea pig
OECD Guideline 406 (Skin Sensitisation)

Reproductive toxicant :

2,2'-IMINODIETHANOL (CAS: 111-42-2)

Suspected of damaging fertility and the unborn child.

11.1.2. Mixture

No toxicological data available for the mixture.

Monograph(s) from the IARC (International Agency for Research on Cancer) :

CAS 102-71-6 : IARC Group 3 : The agent is not classifiable as to its carcinogenicity to humans.

CAS 111-42-2 : IARC Group 2B : The agent is possibly carcinogenic to humans.

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SECTION 12 : ECOLOGICAL INFORMATION

Harmful to aquatic life with long lasting effects.

The product must not be allowed to run into drains or waterways.

12.1. Toxicity

12.1.1. Substances

2,2'-IMINODIETHANOL (CAS: 111-42-2)

Fish toxicity :

LC50 = 460 mg/l

Species : *Oncorhynchus mykiss*

Duration of exposure : 96 h

Crustacean toxicity :

EC50 = 30.1 mg/l

Species : *Ceriodaphnia dubia*

Duration of exposure : 48 h

Algae toxicity :

ECr50 = 9.5 mg/l

Species : *Pseudokirchnerella subcapitata*

Duration of exposure : 72 h

AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD., N,N-BIS(HYDROXYETHYL)

Fish toxicity :

LC50 = 2.4 mg/l

Species : *Oncorhynchus mykiss*

Duration of exposure : 96 h

OECD Guideline 203 (Fish, Acute Toxicity Test)

NOEC = 0.32 mg/l

Duration of exposure : 28 days

Other guideline

Crustacean toxicity :

EC50 = 3.2 mg/l

Species : *Daphnia magna*

Duration of exposure : 48 h

OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

NOEC = 0.07 mg/l

Species : *Daphnia magna*

Duration of exposure : 21 days

OECD Guideline 211 (Daphnia magna Reproduction Test)

Algae toxicity :

ECr50 = 3.9 mg/l

Species : *Scenedesmus subspicatus*

Duration of exposure : 72 h

NOEC = 0.3 mg/l

Species : *Scenedesmus subspicatus*

Duration of exposure : 72 h

REACH Method C.3 (Algal Inhibition test)

HYDROXYETHYLETHYLENDIAMINTRIACETIC ACID, TRISODIUMSALT (CAS: 139-89-9)

Fish toxicity :

LC50 > 100 mg/l

Species : Others

Duration of exposure : 96 h

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OECD Guideline 203 (Fish, Acute Toxicity Test)

NOEC > 25.7 mg/l

Species : Danio rerio

Duration of exposure : 35 days

OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test)

Crustacean toxicity :

EC50 > 100 mg/l

Species : Daphnia magna

Duration of exposure : 48 h

NOEC = 25 mg/l

Species : Daphnia magna

Duration of exposure : 21 days

12.1.2. Mixtures

No aquatic toxicity data available for the mixture.

12.2. Persistence and degradability

12.2.1. Substances

ETHOXYLATED ALCOHOL SECONDARY C11-15 (CAS: 68131-40-8)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

HYDROXYETHYLETHYLENDIAMINTRIACETIC ACID, TRISODIUMSALT (CAS: 139-89-9)

Biodegradability :

Non-rapidly degradable.

2,2'-IMINODIETHANOL (CAS: 111-42-2)

Biodegradability :

Rapidly degradable.

2-AMINOETHANOL (CAS: 141-43-5)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

AMIDES, C8-18 (EVEN NUMBERED) AND C18-UNSATD., N,N-BIS(HYDROXYETHYL)

Biodegradability :

no degradability data is available, the substance is considered as not degrading quickly.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :

WGK 2 : Hazardous for water.

SECTION 13 : DISPOSAL CONSIDERATIONS

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

13.1. Waste treatment methods

Do not pour into drains or waterways.

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Waste :

Waste management is carried out without endangering human health, without harming the environment and, in particular without risk to water, air, soil, plants or animals.

Recycle or dispose of waste in compliance with current legislation, preferably via a certified collector or company.

Do not contaminate the ground or water with waste, do not dispose of waste into the environment.

Soiled packaging :

Empty container completely. Keep label(s) on container.

Give to a certified disposal contractor.

Codes of wastes (Decision 2014/955/EC, Directive 2008/98/EEC on hazardous waste) :

N/A

SECTION 14 : TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport (ADR 2019 - IMDG 2018 - ICAO/IATA 2020).

14.1. UN number

3267

14.2. UN proper shipping name

UN3267=CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.

(2-aminoethanol)

14.3. Transport hazard class(es)

- Classification :



8

14.4. Packing group

II

14.5. Environmental hazards

-

14.6. Special precautions for user

ADR/RID	Class	Code	Pack gr.	Label	Ident.	LQ	Provis.	EQ	Cat.	Tunnel
	8	C7	II	8	80	1 L	274	E2	2	E

IMDG	Class	2°Label	Pack gr.	LQ	EMS	Provis.	EQ	Stowage Handling	Segregation
	8	-	II	1 L	F-A, S-B	274	E2	Category B SW2	SGG18 SG35

IATA	Class	2°Label	Pack gr.	Passager	Passager	Cargo	Cargo	note	EQ
	8	-	II	851	1 L	855	30 L	A3 A803	E2
	8	-	II	Y840	0.5 L	-	-	A3 A803	E2

For limited quantities, see part 2.7 of the OACI/IATA and chapter 3.4 of the ADR and IMDG.

For excepted quantities, see part 2.6 of the OACI/IATA and chapter 3.5 of the ADR and IMDG.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No data available.

EM-300 Metal cleaner

SECTION 15 : REGULATORY INFORMATION

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

- Classification and labelling information included in section 2:

The following regulations have been used:

- EU Regulation No. 1272/2008 amended by EU Regulation No. 2020/217 (ATP 14)

- Container information:

No data available.

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV vom 18/04/2017, KBws) :

WGK 2 : Hazardous for water.

15.2. Chemical safety assessment

No data available.

SECTION 16 : OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The mixture must not be used for other uses than those specified in section 1 without having first obtained written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information in this safety data sheet must be regarded as a description of the safety requirements relating to the mixture and not as a guarantee of the properties thereof.

Wording of the phrases mentioned in section 3 :

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure .
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations :

DNEL : Derived No-Effect Level

PNEC : Predicted No-Effect Concentration

CMR: Carcinogenic, mutagenic or reprotoxic.

UFI : Unique Formula Identifier

ADR : European agreement concerning the international carriage of dangerous goods by Road.

IMDG : International Maritime Dangerous Goods.

IATA : International Air Transport Association.

ICAO : International Civil Aviation Organisation

RID : Regulations concerning the International carriage of Dangerous goods by rail.

WGK : Wassergefährdungsklasse (Water Hazard Class).

GHS05 : Corrosion

GHS08 : Health hazard

PBT: Persistent, bioaccumulable and toxic.

vPvB : Very persistent, very bioaccumulable.

SVHC : Substances of very high concern.