

EM-300



SAFETY DATA SHEET

(REACH regulation (EC) n° 1907/2006 - n° 2020/878)

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

1.1. Product identifier

Product name : EM-300

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

Relevant identified uses of the substance or mixture:

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 : Gerauerstr. 34 D-64546 Mörfelden Walldorf

Telephone : +49 (0) 6105-40670 Fax : ++49 (0) 6105-406750

info@ultraschall-welt.de

www.emag-germany.de

1.4. Emergency telephone number : Suisse : 145 (24h/24).

24-hour emergency call, poison control Berlin: 030-30686700

>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, H361).

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

EC 205-483-3

EC 203-868-0

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

2-AMINOETHANOL

2,2'-IMINODIETHANOL

Hazard statements :

H314

H361

H412

Precautionary statements - Prevention :

P260

P280

Causes severe skin burns and eye damage.

Suspected of damaging fertility or the unborn child .

Harmful to aquatic life with long lasting effects.

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

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

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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.

P310

Immediately call a POISON CENTER/doctor.

Precautionary statements - Disposal :

P501

Dispose of contents/container to a licensed chemical disposal agency.

> **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.

The mixture does not contain substances $\geq 0.1\%$ with endocrine disrupting properties in accordance with the criteria of the Delegated Regulation (EU) 2017/2100 of the Commission or Regulation (EU) 2018/605 of the Commission.

>SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

> **Composition :**

Identification	(EC) 1272/2008	Note	%
CAS: 68155-07-7 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
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
CAS: 111-42-2 EC: 203-868-0 REACH: 01-2119488930-28-0000 2,2'-IMINODIETHANOL	GHS07, GHS05, GHS08 Dgr Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361 STOT RE 2, H373	[1] [2]	2.5 \leq x % < 10
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
CAS: 90622-74-5 EC: 931-335-9 REACH: 01-2119489409-22-XXXX AMIDES, C12-18(EVEN-NUMBERED) AND C18(UNSATD.),N,N-BIS(HYDROXYETHYL)	GHS05, GHS09 Dgr Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411		1 \leq x % < 2.5

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CAS: 68131-40-8 EC: 614-295-4 REACH: 01-2119560577-29-0000 ALCOHOLS, C11-15-SECONDARY, ETHOXYLATED	GHS07, GHS05 Dgr Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Acute Tox. 4, H332		1 ≤ x % < 2.5
EC: 931-700-2 REACH: 01-2119529251-48-0013 BETAINES, C12-14-ALKYLDIMETHYL	GHS05 Dgr Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412		1 ≤ x % < 2.5

> Specific concentration limits:

Identification	Specific concentration limits	ATE
CAS: 111-42-2 EC: 203-868-0 REACH: 01-2119488930-28-0000 2,2'-IMINODIETHANOL		dermal: ATE = 12200 mg/kg BW oral: ATE = 1600 mg/kg BW
CAS: 139-89-9 EC: 205-381-9 REACH: 01-2119972845-22 HYDROXYETHYLETHYLENDIAMINTRIAC ETIC ACID, TRISODIUMSALT		oral: ATE = 1612 mg/kg BW
EC: 931-700-2 REACH: 01-2119529251-48-0013 BETAINES, C12-14-ALKYLDIMETHYL		oral: ATE = 2640 mg/kg BW

Information on ingredients :

(Full text of H-phrases: see section 16)

[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.

Watch out for any remaining product between skin and clothing, watches, shoes, etc.

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.

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.

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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

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.

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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.

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 (2022/431, 2019/1831, 2017/2398, 2017/164, 2009/161, 2006/15/CE, 2000/39/CE, 98/24/CE) :

CAS	VME-mg/m3	VME-ppm	VLE-mg/m3	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/m3			Skin; A3	

- Germany - AGW (BAuA - TRGS 900, 02/2022) :

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/m3	15 mg/m3				

- France (INRS - Outils 65 / 2021-1849, 2021-1763, decree of 09/12/2021) :

CAS	VME-ppm	VME-mg/m3	VLE-ppm	VLE-mg/m3	Notes	TMP No
141-43-5	1	2.5	3	7.6	-	49. 49 Bis
111-42-2	3	15	-	-	-	49.49 Bis

- Switzerland (Suva 2021) :

CAS	VME	VLE	Valeur plafond	Notations
141-43-5	2 ppm 5 mg/m ³	4 ppm 10 mg/m ³		
111-42-2	1 ppm	1 ppm		

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- UK / WEL (Workplace exposure limits, EH40/2005, Fourth Edition 2020) :

CAS	TWA :	STEL :	Ceiling :	Definition :	Criteria :
141-43-5	1 ppm 2.5 mg/m³	3 ppm 7.6 mg/m³		Sk	

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

BETAINES, C12-14-ALKYLDIMETHYL

- | | | |
|---|--|---|
| > | Final use:
Exposure method:
Potential health effects:
DNEL :

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

Inhalation.
Long term systemic effects.
42.61 mg of substance/m3 |
| > | Final use:
Exposure method:
Potential health effects:
DNEL :

Exposure method:
Potential health effects:
DNEL :

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

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

Inhalation.
Long term systemic effects.
12.61 mg of substance/m3 |

AMIDES, C12-18(EVEN-NUMBERED) AND C18(UNSATD.),N,N-BIS(HYDROXYETHYL) (CAS: 90622-74-5)

- | | | |
|---|--|---|
| > | Final use:
Exposure method:
Potential health effects:
DNEL :

Exposure method:
Potential health effects:
DNEL :

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

Dermal contact.
Long term local effects.
93.6 µg of substance/cm2

Inhalation.
Long term systemic effects.
73.4 mg of substance/m3 |
| > | Final use:
Exposure method:
Potential health effects:
DNEL :

Exposure method:
Potential health effects:
DNEL :

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

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

Dermal contact.
Long term local effects. |

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DNEL : 56.2 µg of substance/cm2

Exposure method: Inhalation.
 Potential health effects: Long term systemic effects.
 DNEL : 21.73 mg of substance/m3

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

Final use: **Workers.**
 Exposure method: Inhalation.
 Potential health effects: Long term local effects.
 DNEL : 10 mg of substance/m3

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

Final use: **Workers.**
 Exposure method: 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: **Consumers.**
 Exposure method: 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

|> Predicted no effect concentration (PNEC):

BETAINES, C12-14-ALKYLDIMETHYL

Environmental compartment: Soil.
 PNEC : 10 mg/kg

Environmental compartment: Fresh water.
 PNEC : 0.008 mg/l

Environmental compartment: Sea water.
 PNEC : 0.001 mg/l

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

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

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

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

Environmental compartment:
 PNEC : Vermivore predators (oral).
 0.16 mg/kg

AMIDES, C12-18(EVEN-NUMBERED) AND C18(UNSATD.),N,N-BIS(HYDROXYETHYL) (CAS: 90622-74-5)

Environmental compartment:
 PNEC : Soil.
 0.028 mg/kg

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

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

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

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

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

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

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-AMINOETHANOL (CAS: 141-43-5)

Environmental compartment:
 PNEC : Soil.
 1.29 mg/kg

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

Environmental compartment:
 Sea water.

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PNEC :	0.007 mg/l
Environmental compartment: PNEC :	Intermittent waste water. 0.028 mg/l
Environmental compartment: PNEC :	Fresh water sediment. 0.357 mg/kg
Environmental compartment: PNEC :	Marine sediment. 0.0357 mg/kg
Environmental compartment: PNEC :	Waste water treatment plant. 100 mg/l

8.2. Exposure controls

Personal protection measures, such as personal protective equipment

Pictogram(s) indicating the obligation of wearing personal protective equipment (PPE) :



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.

- 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 :

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

- Butyl Rubber (Isobutylene-isoprene copolymer)

|> - 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.

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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 :

- A3 (Brown)

Use ventilation system in case of spray/vapours formation. Wear respiratory protection in case of inadequate ventilation.

|>SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state

Physical state : Viscous liquid.

Colour

Color: yellow/orange

|> Odour

Odour threshold : Not stated.

Odour: characteristic

|> Melting point

Melting point/melting range : Not specified.

|> Freezing point

Freezing point / Freezing range : Not stated.

|> Boiling point or initial boiling point and boiling range

Boiling point/boiling range : Not specified.

|> Flammability

Flammability (solid, gas) : Not stated.

|> Lower and upper explosion limit

Explosive properties, lower explosivity limit (%) : Not stated.

Explosive properties, upper explosivity limit (%) : Not stated.

|> Flash point

Flash point interval : Not relevant.

Auto-ignition temperature

Self-ignition temperature : Not specified.

Decomposition temperature

Decomposition point/decomposition range : Not specified.

pH

pH : 10.80 .
Slightly basic.

pH (aqueous solution) : 10.10

|> Kinematic viscosity

Viscosity : Not stated.

|> Solubility

Water solubility : Dilutable.

Fat solubility : Not stated.

|> Partition coefficient n-octanol/water (log value)

Partition coefficient: n-octanol/water : Not stated.

Vapour pressure

Vapour pressure (50°C) : Not relevant.

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Density and/or relative density

Density : 1.025

> Relative vapour density

Vapour density : Not stated.

> 9.2. Other information

% VOC by g/L : 0 %

> 9.2.1. Information with regard to physical hazard classes

No data available.

> 9.2.2. Other safety characteristics

No data available.

> Miscibility

Miscibility : 100 %

>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
- oxidising agents

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 hazard classes as defined in Regulation (EC) No 1272/2008

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.

Suspected human reproductive toxicant.

11.1.1. Substances

> Acute toxicity :

BETAINES, C12-14-ALKYLDIMETHYL

Oral route : LD₅₀ = 2640 mg/kg
Species : Mouse

AMIDES, C12-18(EVEN-NUMBERED) AND C18(UNSATD.),N,N-BIS(HYDROXYETHYL) (CAS: 90622-74-5)

Oral route : LD₅₀ > 5000 mg/kg

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Species : Rat

Dermal route :

LD50 > 2000 mg/kg

Species : Rat

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

Dermal route :

LD50 = 12200 mg/kg

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)

11.1.2. Mixture

No toxicological data available for the mixture.

11.2. Information on other hazards

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

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

>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**

BETAINES, C12-14-ALKYLDIMETHYL

Fish toxicity :

LC50 = 4.44 mg/l

Crustacean toxicity :

EC50 = 7.76 mg/l

Algae toxicity :

ECr50 = 1.7 mg/l

NOEC = 0.38 mg/l

AMIDES, C12-18(EVEN-NUMBERED) AND C18(UNSATD.),N,N-BIS(HYDROXYETHYL) (CAS: 90622-74-5)

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Fish toxicity : LC50 = 2.4 mg/l

Crustacean toxicity : EC50 = 3.2 mg/l
 Species : Daphnia magna

NOEC = 0.07 mg/l
 Species : Daphnia magna

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

Fish toxicity : LC50 > 100 mg/l
 Species : Others
 Duration of exposure : 96 h
 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

BETAINES, C12-14-ALKYLDIMETHYL

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

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

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

AMIDES, C12-18(EVEN-NUMBERED) AND C18(UNSATD.),N,N-BIS(HYDROXYETHYL) (CAS: 90622-74-5)

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

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) (CAS: 68155-07-7)

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Biodegradability :

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

12.3. Bioaccumulative potential

> 12.3.1. Substances

AMIDES, C12-18(EVEN-NUMBERED) AND C18(UNSATD.),N,N-BIS(HYDROXYETHYL) (CAS: 90622-74-5)

Octanol/water partition coefficient : log K_{ow} = 4.2

Bioaccumulation :

BCF = 58

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No data available.

German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, 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.

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) :

07 06 04 * other organic solvents, washing liquids and mother liquors

>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 2021 - IMDG 2020 [40-20] - ICAO/IATA 2022 [63]).

14.1. UN number or ID number

3267

14.2. UN proper shipping name

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

(2-aminoethanol)

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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. Maritime transport in bulk according to IMO instruments

No data available.

>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. 2022/692 (ATP 18)

> - Container information:

The mixture does not contain any substance restricted under Annex XVII of Regulation (EC) No. 1907/2006 (REACH):
<https://echa.europa.eu/substances-restricted-under-reach>.

- Particular provisions :

No data available.

- German regulations concerning the classification of hazards for water (WGK, AwSV Annex I, 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.

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|> 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.
H361	Suspected of damaging fertility or 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 :

LD50 : The dose of a test substance resulting in 50% lethality in a given time period.
LC50 : The concentration of a test substance resulting in 50% lethality in a given period.
EC50 : The effective concentration of substance that causes 50% of the maximum response.
ECr50 : The effective concentration of substance that causes 50% reduction in growth rate.
NOEC : The concentration with no observed effect.
REACH : Registration, Evaluation, Authorization and Restriction of Chemical Substances.
ATE : Acute Toxicity Estimate
BW : Body Weight
DNEL : Derived No-Effect Level
PNEC : Predicted No-Effect Concentration
CMR: Carcinogenic, mutagenic or reprotoxic.
UFI : Unique formulation identifier.
STEL : Short-term exposure limit
TWA : Time Weighted Averages
TMP : French Occupational Illness table
TLV : Threshold Limit Value (exposure)
AEV : Average Exposure Value.
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.
|> Modification compared to the previous version