

**ACEF S.p.A.****000079 - ETHYLENEDIAMINE-TETRAACETIC ACID (EDTA)**Revision nr.4
Dated 16/05/2013
Printed on 16/05/2013
Page n. 1 / 7

EN

Safety Data Sheet

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Code: 000079
Product name: ETHYLENEDIAMINE-TETRAACETIC ACID (EDTA)

Empirical formula:
CAS number: 60-00-4
INDEX number: 607-429-00-8
EC number: 200-449-4

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

Intended use: -aggiunta chelati a formulazioni liquide e solide (UE : ES2) -uso in processi industriale in cui i chelati vengono consumati (UE : ES3)

1.3. Details of the supplier of the safety data sheet

Name: ACEF S.p.A.
Full address: Via Umbria, 8/14
District and Country: 29017 Fiorenzuola d'Arda Italia PC
Tel.: 0523/241911
Fax: 0523/241968

e-mail address of the competent person responsible for the Safety Data Sheet: sicurezza@acef.it

1.4. Emergency telephone number

For urgent inquiries refer to:
Centro Antiveleni di Milano - Tel. +39 02-66101029 - (Ospedale Niguarda)
Centro Antiveleni di Pavia - Tel. +39 0382-24444 - (IRCCS Fondazione Maugeri)
Centro Antiveleni di Bergamo - Tel. 800-883300 - (Ospedali Riuniti)
Centro Antiveleni di Firenze - Tel. +39 055-7947819 - (Ospedale Careggi)
Centro Antiveleni di Roma - Tel. +39 06-3054343 - (Policlinico Gemelli)
Centro Antiveleni di Roma - Tel. +39 06-49978000 - (Policlinico Umberto I)
Centro Antiveleni di Napoli - Tel. +39 081-7472870 - (Ospedale Cardarelli)

2. Hazards identification

2.1. Classification of the substance or mixture

The product is classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet

2.1.1. Regulation 1272/2008 (CLP) and following amendments and adjustments

Hazard classification and indication:
Eye Irrit. 2 H319
Acute Tox. 4 H332

2.1.2. Directive 67/548/EEC and following amendments and adjustments

Danger Symbols: Xn
R phrases: 20-36

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet



ACEF S.p.A.

000079 - ETHYLENEDIAMINE-TETRAACETIC ACID (EDTA)

Revision nr.4
Dated 16/05/2013
Printed on 16/05/2013
Page n. 2 / 7

EN

2.2. Label elements

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Pictograms:



Warning: Warning

Hazard indication:

H319 Causes serious eye irritation.
H332 Harmful if inhaled.

Caution recommendations:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash with water thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.

Contains: EDTA

INDEX 607-429-00-8

2.3. Other hazards

Information not available

3. Composition/information on ingredients

3.1. Substances

Contains:

Identification	Conc. %	Classification 67/548/EEC	Classification 1272/2008 (CLP)
EDTA			
CAS 60-00-4	100	Xn R20, Xi R36	Eye Irrit. 2 H319, Acute Tox. 4 H332
EC 200-449-4			
INDEX 607-429-00-8			
Reg. no. 01-2119486399-18-0001			

Xn= HARMFUL, Xi= IRRITANT

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet

3.2. Mixtures

Information not relevant

4. First aid measures

4.1. Description of first aid measures

EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.

SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before using them again.

INHALATION: Remove to open air. If breathing is irregular, seek medical advice.

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

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

For symptoms and effects caused by the contained substances see chap. 11

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

Follow doctor's orders

5. Firefighting measures**5.1. Extinguishing media**

SUITABLE EXTINGUISHING MEDIA

The extinction equipment used should be of the conventional kind: carbon dioxide, foam, powder and nebulised water.

EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).

The product is combustible and, when the powder is released into the air in sufficient concentrations and in the presence of a source of ignition, it can create explosive mixtures with air. Fires may start or get worse by leakage of the solid product from the container, when it reaches high temperatures or through contact with sources of ignition.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Hardhat with visor, fireproof clothing (fireproof jacket and trousers with ties around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), a depressurised mask with facemask covering the whole of the operator's face or a self-respirator (self-protector) in the event of large quantities of fume.

6. Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Wear appropriate protective equipment. Send away individuals who are not suitably equipped. Use breathing equipment if fumes or powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or the leaked product before donning appropriate protective gear. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, refer to the other sections of this sheet.

6.2. Environmental precautions

The product must not penetrate the sewers, surface water, ground water and neighbouring areas. Dilute the product well with water after collection.

6.3. Methods and material for containment and cleaning up

For liquid products, suck into a suitable container (made of material not incompatible with the product) and soak up any leaked product with absorbent inert material (sand, vermiculite, diatomaceous earth, Kieselguhr, etc). Collect the majority of the remaining material and deposit in containers for disposal. For solid products, use spark proof mechanical tools to collect the leaked product and place in plastic containers. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7. Handling and storage**7.1. Precautions for safe handling**

Store in closed, labelled containers

7.2. Conditions for safe storage, including any incompatibilities

Normal storage conditions without particular incompatibilities

7.3. Specific end use(s)

Information not available



8. Exposure controls/personal protection

8.1. Control parameters

Information not relevant

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration or bad air vent. If such operations do not make it possible to keep the concentration of the product below the permitted workplace exposure thresholds a suitable respiratory tract protection must be used. See product label for hazard details during use. Ask your chemical substance suppliers for advice when choosing personal protection equipment. Personal protection equipment must comply with the rules in force indicated below.

HAND PROTECTION

Protect hands with category I (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in latex, PVC or equivalent.

The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves' limit depends on the duration of exposure.

EYE PROTECTION

Wear protective airtight goggles (ref. standard EN 166).

SKIN PROTECTION

Wear category I professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.

RESPIRATORY PROTECTION

If the threshold value for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company's prevention and protection service is exceeded, wear an FFP3 (ref. standard EN 141) type half mask.

The use of breathing protection equipment, such as masks with organic vapour and dust/mist cartridges, is necessary in the absence of technical measures limiting worker exposure. The protection provided by masks is in any case limited.

If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	powder
Colour	white
Odour	characteristic
Odour threshold	Not available
pH	2,5 ca.
Melting or freezing point	Not available
Boiling point	Not available
Distillation range	Not available
Flash point	Not available
Evaporation Rate	Not available
Flammability of solids and gases	Not available
Lower inflammability limit	Not available
Upper inflammability limit	Not available
Lower explosive limit	Not available
Upper explosive limit	Not available
Vapour pressure	Not available
Vapour density	Not available
Specific gravity	0,6 ca.
Solubility	Water solubility (20 °C) 0,20 g/l
Partition coefficient: n-octanol/water	Not available
Ignition temperature	> 220 °C
Decomposition temperature	Not available
Viscosity	Not available
Reactive Properties	NO

9.2. Other information

VOC (Directive 1999/13/EC) : 0%



10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage

10.4. Conditions to avoid

None in particular, however the usual precautions used for chemical products should be respected.

10.5. Incompatible materials

10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, vapours potentially dangerous to health may be released.

ETHYLENE DIAMINE TETRA ACETIC ACID: nitric acid.

11. Toxicological information

11.1. Information on toxicological effects

Acute effects: inhalation of this product is harmful. This product may irritate mucosas, the upper respiratory tract, eyes and skin.

Exposure symptoms may include: stinging and irritated eyes, mouth, nose, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness.

In the most serious cases, inhalation of this product may cause larynx and bronchial tube edema and irritation, chemical pneumonia and pulmonary edema. Ingestion of even small amounts of product may cause health problems (stomach pain, nausea, sickness, diarrhoea).

EDTA

LD50 (Oral): 4500,000 mg/kg (OECD 401)

12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

12.1. Toxicity

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

Information not available

12.5. Results of PBT and vPvB assessment

Information not available

12.6. Other adverse effects

Information not available

13. Disposal considerations

13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.



14. Transport information

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

15. Regulatory information

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

Seveso category None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006
None

Substances in Candidate List (Art. 59 REACH)
None

Substances subject to authorisation (Annex XIV REACH)
None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment

No chemical safety assessment has been processed for the mixture and the substances it contains

16. Other information

Key for the CLP classifications mentioned in sections 2 and 3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
Eye Irrit. 2	Eye irritation, category 2
H332	Harmful if inhaled.
H319	Causes serious eye irritation.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R20	HARMFUL BY INHALATION.
R36	IRRITATING TO EYES.

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. The Merck Index. - 10th Edition
8. Handling Chemical Safety
9. Niosh - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique (toxicological sheet)
11. Patty - Industrial Hygiene and Toxicology
12. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product .

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Changes to previous review:



ACEF S.p.A.

000079 - ETHYLENEDIAMINE-TETRAACETIC ACID (EDTA)

Revision nr.4
Dated 16/05/2013
Printed on 16/05/2013
Page n. 7 / 7

EN

The following sections were modified:
02/03/08/10/11/12