

Revision nr.4 Dated 18/07/2013 Printed on 18/07/2013 Page n. 1 / 7

Safety Data Sheet

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

1.1. Product identifier

Code: 000081

Product name TETRASDOIUM EDTA

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

Intended use aggiunta chelati a formulazioni liquide e solide (ES2), in formulaz ioni spray

(ES4), in formulazioni non-spray (ES5), in prodotti di consumo (ES7)

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 PC

Italia 0523/2

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 Regulationn 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:

Acute Tox. 4 H332 Acute Tox. 4 H302 Skin Irrit. 2 H315 Eye Dam. 1 H318

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

Danger Symbols: Xn

R phrases: 20/22-38-41

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



Revision nr.4 Dated 18/07/2013 Printed on 18/07/2013 Page n. 2 / 7

2.2. Label elements

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

Pictograms:



Warning: Danger

Hazard indication:

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.

H332 Harmful if inhaled.

Caution recommendations:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash with water thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

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

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

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.

P310 Immediately call a POISON CENTER or doctor/physician.
P362 Take off contaminated clothing and wash before reuse.

P501 Dispose of contents/container to according to applicable regulations.

Contains: TETRASODIUM EDTA

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)

TETRASODIUM EDTA

CAS 64-02-8 97 - 100 Xn R20, Xn R22, Xi R41 Eye Dam. 1 H318, Acute Tox. 4 H332, Acute Tox. 4 H302

EC 200-573-9

Reg. no. 01-2119486762-27-XXXX

SODIUM HYDROXIDE

CAS 1310-73-2 0,50 - 1 C R35 Skin Corr. 1A H314

EC 215-185-5 INDEX 011-002-00-6

INDEX 011-002-00-0

Xn= HARMFUL,Xi= IRRITANT,C= CORROSIVE

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



ACEF S.p.A.

000081 - TETRASDOIUM EDTA

Revision nr.4 Dated 18/07/2013 Printed on 18/07/2013 Page n. 3 / 7

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: Immediately wash with plenty of water. Remove all contaminated clothing. Obtain immediate medical attention. Wash contaminated clothing separately before using them again.

INHALATION: Remove to open air. If breathing is irregular or stopped, administer artificial respiration. Obtain immediate medical attention

INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Give nothing 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, diatomeous 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.



Revision nr.4 Dated 18/07/2013 Printed on 18/07/2013 Page n. 4 / 7

7. Handling and storage

7.1. Precautions for safe handling

Do not smoke while handling and use.

7.2. Conditions for safe storage, including any incompatibilities

Store in a well ventilated place, keep far away from sources of heat, bright flames and sparks and other sources of ignition.

7.3. Specific end use(s)

Information not available

8. Exposure controls/personal protection

8.1. Control parameters

Product name	Туре		y TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm
SODIUM HYDROXIDE	TLV-ACGIH OEL WEL	IRL UK			2(C) 2 2	
C = CEILING						

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 II (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in PVC, neoprene, nitryl 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 hood visor or protective visor together with airtight goggles (ref. standard EN 166) SKIN PROTECTION

Wear category II 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).

An emergency eye washing and shower system must be provided.

In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance granular powder
Colour white
Odour characteristic
Odour threshold Not available

pH 11-12 (1% in soluzione)

Melting or freezing point Not available



ACEF S.p.A.

000081 - TETRASDOIUM EDTA

Revision nr.4 Dated 18/07/2013 Printed on 18/07/2013 Page n. 5 / 7

Boiling point Not available Distillation range Not available Not available Flash point **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 0,650 Kg/l ca.

Solubility Water solubility (20 °C) 1100 g/l

Partition coefficient: n-octanol/water Ignition temperature > 200 °C
Decomposition temperature Not available
Viscosity Not available
Reactive Properties Not available

9.2. Other information

 Molecular weight
 380,20

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

10. Stability and reactivity

10.1. Reactivity

10.2. Chemical stability

10.3. Possibility of hazardous reactions

Information not available

10.4. Conditions to avoid

SODIUM HYDROXIDE: exposure to the air, moisture and sources of heat.

10.5. Incompatible materials

SODIUM HYDROXIDE: strong acids, ammonia, zinc, lead, aluminium, water and flammable liquids.

10.6. Hazardous decomposition products

11. Toxicological information

11.1. Information on toxicological effects

Acute effects: inhalation and ingestion of this product are 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 this product may cause serious health disorders (stomach pain, nausea, sickness, diarrhoea).

This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

TETRASODIUM EDTA

LD50 (Oral): 1780,000 mg/Kg rat

SODIUM HYDROXIDE

LD50 (Oral): 1350,000 mg/kg Rat LD50 (Dermal): 1350,000 mg/kg Rat

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



ACEF S.p.A.

000081 - TETRASDOIUM EDTA

Revision nr.4 Dated 18/07/2013 Printed on 18/07/2013 Page n. 6 / 7

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

12.6. Other adverse effects

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)

Substances subject to authorisarion (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

chemical safety assessment has been performed for the following contained substances **TETRASODIUM EDTA**

16. Other information

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

Acute Tox. 4 Acute toxicity, category 4 Skin Corr. 1A Skin corrosion, category 1A Eye Dam. 1 Serious eye damage, category 1 Skin Irrit. 2 Skin irritation, category 2 H332 Harmful if inhaled.

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage.

H315 Causes skin irritation.

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

R20 HARMFUL BY INHALATION.



Revision nr.4 Dated 18/07/2013 Printed on 18/07/2013 Page n. 7 / 7

R22 HARMFUL IF SWALLOWED. R35 CAUSES SEVERE BURNS.

R41 RISK OF SERIOUS DAMAGE 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:

The following sections were modified:

15