



## Safety Data Sheet EDTA 0.05 mol/l

## Section 1: Chemical Product and Company Identification

Product Name: Ethylenediaminetetraacetic acid Contact Information:

Catalog Codes: 731

Synonym: EDTA

CAS#: - Email: info@drm-chem.com

RTECS: - Address: #7, Afshar javan Alley, Sohrevardi

St ,Tehran, Iran

post code: 1551818111

Tehran Sales: +98 21 88177760

Chemical Name: Ethylenediaminetetraacetic acid disodium

salt

Chemical Formula: Na2-EDTA 2 H2O Order Online: Drm-chem.com

# Section 2: Composition and Information on Ingredients Composition: Name CAS # Concentration Ethylenediaminetetraacetic acid disodium salt

Toxicological Data on Ingredients: LD50 Oral - Rat - male and female - 2,800 mg/kg.

#### **Section 3: Hazards Identification**

#### Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Corrosive to Metals (Category 1), H290

Specific target organ toxicity - repeated exposure, Inhalation (Category 2), Respiratory

Tract. H373

For the full text of the H-Statements mentioned in this Section, see Section 16.

#### Label elements

## Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word Warning

Hazard statement(s)

H290 May be corrosive to metals.

H373 May cause damage to organs (Respiratory Tract) through

prolonged or repeated exposure if inhaled.

Precautionary statement(s)

P234 Keep only in original packaging.

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P314 Get medical advice/ attention if you feel unwell.
P390 Absorb spillage to prevent material damage.

P501 Dispose of contents/ container to an approved waste disposal

plant.

Supplemental Hazard

Statements

Reduced Labeling (<= 125 ml)

Pictogram



Signal word Warning Hazard statement(s) none

Precautionary statement(s)

none

Supplemental Hazard

Statements

None

#### Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### **Section 4: First Aid Measures**

### **Description of first-aid measures**

#### General advice

Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

#### If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult aphysician.

#### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 3) and/or in section 11

#### Indication of any immediate medical attention and special treatment needed

No data available

## **Section 5: Firefighting measures**

#### **Extinguishing media**

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

## Special hazards arising from the substance or mixture

Not combustible.

Fire may cause evolution of:

nitrogen oxides

Ambient fire may liberate hazardous vapours.

#### Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### **Further information**

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from

contaminating surface water or the ground water system.

#### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.

#### **Environmental precautions**

Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

#### Reference to other sections

For disposal see section 13.

## Section 7: Handling and Storage

# Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

#### Hygiene measures

Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance. For precautions see section 3.

#### Conditions for safe storage, including any incompatibilities Storage conditions

Tightly closed.

Recommended storage temperature see product label.

#### **Section 8: Exposure Controls/Personal Protection**

#### **Control parameters**

#### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

#### **Exposure controls**

#### Personal protective equipment

#### Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

#### Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: > 480 min Material tested: KCL 741 Dermatril® L

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contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: > 480 min Material tested: KCL 741 Dermatril® L

#### **Body Protection**

protective clothing

#### Respiratory protection

Recommended Filter type: filter ABEK

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

#### Control of environmental exposure

Do not let product enter drains.

## **Section 9: Physical and Chemical Properties**

#### Information on basic physical and chemical properties

a) Appearance Form: liquid

Color: colorless

b) Odor odorless

c) Odor Threshold Not applicable

d) pH No data available

e) Melting

point/freezing point

No data available

f) Initial boiling point

and boiling range

No data available

g) Flash point Not applicable

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

i) Upper/lower flammability or explosive limits No data available

No data available k) Vapor pressure

I) Vapor density No data available

1.14 g/cm<sup>3</sup> (20 °C) m) Relative density

at 20 °C soluble n) Water solubility

o) Partition coefficient:

n-octanol/water

No data available

p) Autoignition

temperature

Not applicable

q) Decomposition

temperature

No data available

r) Viscosity Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

s) Explosive properties No data available t) Oxidizing properties

No data available

#### Other safety information

No data available

## Section 10: Stability and Reactivity Data

#### Reactivity

No data available

#### **Chemical stability**

The product is chemically stable under standard ambient conditions (room temperature).

#### Possibility of hazardous reactions

Violent reactions possible with:

The generally known reaction partners of water.

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The generally known reaction partners of water.

#### **Conditions to avoid**

no information available

#### Incompatible materials

Metals

#### **Hazardous decomposition products**

In the event of fire: see section 5

#### **Section 11: Toxicological Information**

#### Information on toxicological effects

#### **Mixture**

#### **Acute toxicity**

Oral: No data available

Acute toxicity estimate Inhalation - 4 h - > 5 mg/l

(Calculation method)
Dermal: No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/eye irritation

No data available

#### Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

No data available

#### Carcinogenicity

No data available

#### Reproductive toxicity

No data available

#### Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

Mixture may cause damage to organs through prolonged or repeated exposure. - Respiratory Tract

#### **Aspiration hazard**

No data available

#### **Additional Information**

Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

## Components

#### Ethylenedinitrilotetraacetic acid disodium salt

#### **Acute toxicity**

LD50 Oral - Rat - male and female - 2,800 mg/kg (OECD Test Guideline 401)
Acute toxicity estimate Inhalation - 1.6 mg/l (Expert judgment)

Dermal: No data available

#### Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation (OECD Test Guideline 404)

#### Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation Remarks: (ECHA)

#### Respiratory or skin sensitization

No data available

## Germ cell mutagenicity

Test Type: In vitro mammalian cell gene mutation test

Test system: Mouse lymphoma test

Result: negative

# Carcinogenicity

## No data available

## Reproductive toxicity

No data available

## Specific target organ toxicity - single exposure

No data available

#### Specific target organ toxicity - repeated exposure

Inhalation - May cause damage to organs through prolonged or repeated exposure.

- Respiratory Tract

Inhalation - Lungs, larynx

Inhalation - larynx

#### **Aspiration hazard**

No data available

## **Section 12: Ecological Information**

## **Toxicity**

#### **Mixture**

No data available

#### Persistence and degradability

No data available

#### Bioaccumulative potential

No data available

#### Mobility in soil

No data available

#### Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### Other adverse effects

No data available

#### Components

Ethylenedinitrilotetraacetic acid disodium salt

Toxicity to fish static test LC100 - Oncorhynchus mykiss (rainbow trout) – 860 mg/l - 24 h

Remarks: (ECHA)

Toxicity to daphnia

static test EC50 - Daphnia magna (Water flea) - 140 mg/l - 48 h (DIN 38412)

and other aquatic invertebrates

Toxicity to bacteria static test EC50 - activated sludge - > 500 mg/l - 0.5 h (OECD Test Guideline

209)

## **Section 13: Disposal Considerations**

#### Waste treatment methods

#### **Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

## **Section 14: Transport Information**

**UN** number

ADR/RID: - IMDG: - IATA: -

**UN** proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods IATA: Not dangerous goods

Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

Packaging group

ADR/RID: - IMDG: - IATA: -

**Environmental hazards** 

ADR/RID: no IMDG Marine pollutant: no IATA: no

Special precautions for user

**Further information** 

Not classified as dangerous in the meaning of transport regulations.

## **Section 15: Other Regulatory Information**

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

Take note of Dir 94/33/EC on the protection of young people at work.

#### **Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

#### **Section 16: Other Information**

References: Not available

Other Special Considerations: Not available

Created: 12/2023

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