



Specialized in chemicals

Hefei TNJ Chemical Industry Co.,Ltd.

B910-911 Xincheng Business Center,

Qianshan Rd. Hefei 230022 China

Tel : (0086) 551 65418678

Fax: (0086) 551 65418697

Email: info@tnjchem.com

Site: www.tnjchem.com

Material Safety Data Sheet

EDTA CaNa2

Section 1: Chemical Product and Company Identification

Molecular formula: C₁₀H₁₂CaN₂Na₂O₈

CAS Nr: 62-33-9

Molecular weight: 374.30

Synonyms: (Ethylenedinitrilo)tetraaceticacid calcium disodium salt; Calciumdisodium EDTA;

Contact Information for Emergency: (0086) 551 65418678

Hefei TNJ Chemical Industry Co.,Ltd.

B910-911 Xincheng Business Center

Qianshan Road, Hefei

230004Anhui

China

Tel : (0086) 551 65418678

Fax: (0086) 551 65418697

Email: info@tnjchem.com

Site: www.tnjchem.com

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	%By Weight
EDTA CaNa2	62-33-9	99

Section 3: Hazards Identification

EMERGENCY OVERVIEW

RISK

May cause SENSITISATION by skin contact.

Irritating to eyes, respiratory system and skin.

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

Although ingestion is not thought to produce harmful effects, the material may still be damaging to the health of

the individual following ingestion, especially where pre-existing organ (e.g.

EYE

This material can cause eye irritation and damage in some persons.

SKIN

This material can cause inflammation of the skin on contact in some persons.

The material may accentuate any pre-existing dermatitis condition.

Skin contact is not thought to have harmful health effects, however the material may still produce health damage following entry through wounds, lesions or abrasions.

Open cuts, abraded or irritated skin should not be exposed to this material.

Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.

Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

INHALED

The material can cause respiratory irritation in some persons.

The body's response to such irritation can cause further lung damage.

Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

CHRONIC HEALTH EFFECTS

Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems.

Skin contact with the material is more likely to cause a sensitization reaction in some persons compared to the general population.

Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung.

Chelates are occasionally used in therapies for various forms of poisoning. A systemic reaction known as the "excessive chelation syndrome" consists mainly of general unwellness, fatigue, thirst, followed by chills and fever. Injection of EDTA and its salts can cause severe kidney damage with tissue death and internal bleeding, bone marrow depression and critically low levels of calcium.

Section 4: First Aid Measures

SWALLOWED

• Immediately give a glass of water. • First aid is not generally required. If in doubt, contact a Poisons Information Center or a doctor.

EYE

If this product comes in contact with the eyes: • Wash out immediately with fresh running water. • Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

SKIN

If skin contact occurs: • Immediately remove all contaminated clothing, including footwear • Flush skin and hair with running water (and

soap if available).

INHALED

• If fumes or combustion products are inhaled remove from contaminated area. • Lay patient down. Keep warm and rested.

NOTES TO PHYSICIAN

Treat symptomatically.

Section 5: Fire and Explosion Data

Vapour Pressure (mmHG): Negligible

Upper Explosive Limit (%): Not available

Specific Gravity (water=1): Not available

Lower Explosive Limit (%): Not available

EXTINGUISHING MEDIA

- Water spray or fog.
- Foam.

FIRE FIGHTING

- Alert Emergency Responders and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

• Combustible solid which burns but propagates flame with difficulty.
• Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited. Combustion products include: carbon monoxide (CO), carbon dioxide (CO₂), nitrogen oxides (NO_x), metal oxides, other pyrolysis products typical of burning organic material.

May emit poisonous fumes.

May emit corrosive fumes.

FIRE INCOMPATIBILITY

Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.

PERSONAL PROTECTION

Glasses:

Chemical goggles.

Gloves:

Respirator:

Particulate

Section 6: Accidental Release Measures

MINOR SPILLS

- Clean up all spills immediately.
- Avoid breathing dust and contact with skin and eyes.

MAJOR SPILLS

Moderate hazard.

- CAUTION: Advise personnel in area.
- Alert Emergency Responders and tell them location and nature of hazard.

Section 7: Handling and Storage

PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.

Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.

- Do NOT cut, drill, grind or weld such containers.
- In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

RECOMMENDED STORAGE METHODS

- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

STORAGE REQUIREMENTS

Observe manufacturer's storing and handling recommendations.

Section 8: Exposure Controls/Personal Protection

PERSONAL PROTECTION

RESPIRATOR

Particulate

EYE

- Safety glasses with side shields.
- Chemical goggles.

HANDS/FEET

NOTE: The material may produce skin sensitization in predisposed individuals. Care must be taken, when removing gloves and other

protective equipment, to avoid all possible skin contact.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than

240 minutes according to EN 374) is recommended.

- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.

- Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly.

Application of a non-perfumed moisturiser is recommended.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- polychloroprene
- nitrile rubber
- butyl rubber
- fluorocautchouc
- polyvinyl chloride

Gloves should be examined for wear and/ or degradation constantly.

OTHER

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.

ENGINEERING CONTROLS

- Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.

- Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace.

Section 9: Physical and Chemical Properties

PHYSICAL PROPERTIES			
Solid.			
Mixes with water.			
State	Divided solid	Molecular Weight	374.28
Melting Range (° F)	>572	Viscosity	Not Applicable
Boiling Range (° F)	Not available	Solubility in water (g/L)	Miscible
Flash Point (° F)	Not available	pH (1% solution)	Not available
Decomposition Temp (° F)	Not available	pH (as supplied)	Not applicable
Autoignition Temp (° F)	Not available	Vapour Pressure (mmHG)	Negligible
Upper Explosive Limit (%)	Not available	Specific Gravity (water=1)	Not available
Lower Explosive Limit (%)	Not available	Relative Vapor Density (air=1)	Not applicable
Volatile Component (%vol)	Negligible	Evaporation Rate	Not applicable

APPEARANCE

White crystalline powder; mixes with water.

Section 10: Stability and Reactivity Data

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.

STORAGE INCOMPATIBILITY

Salts of ethylenediaminetetraacetic acid (EDTA):

- should not come into contact with strong oxidisers
- are incompatible with metals such as zinc, aluminum, carbon steel, copper, copper alloys, galvanized metals and nickel.
- in contact with metals, such as aluminum, may generate flammable hydrogen gas
- in contact with bases, may evolve hydrogen and oxygen.

Avoid reaction with oxidizing agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11: Toxicological Information

- acute toxicity:

not available data

- skin corrosion/irritation:

not available data

- serious eye damage/irritation:

not available data

- respiratory or skin sensitisation:

not available data

- germ cell mutagenicity:

not available data

- Carcinogenicity:

not available data

- reproductive toxicity:

not available data

- STOT-single exposure:

not available data

- STOT-repeated exposure

not available data

- aspiration hazard

not available data

Information on likely routes of exposure:

Inhalation: Fumes can irritate respiratory tract. Nitrogen oxides which may be released over 150° C can cause a lungs oedema as well as respiratory tract infections

Skin: can be irritant for skin

Eye: can be irritant for eyes
Ingestion: can be irritant for mouth and digestive tract
Other informations:
 N.A.
 Printed 01/12/10 Issued 19/11/2010 Revision 1.0(19/11/2010)

Section 12: Ecological Information

No data

Ecotoxicity

Ingredient	Persistence: Water/Soil	Persistence: Air	Bioaccumulation	Mobility
EDTA calcium disodium salt	HIGH		LOW	MED

Section 13: Disposal Considerations

Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.
 Puncture containers to prevent re-use and bury at an authorized landfill.
 Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.
 A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.
 DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

- Recycle wherever possible.
- Consult manufacturer for recycling options or consult Waste Management Authority for disposal if no suitable treatment or disposal facility can be identified.

Section 14: Transport Information

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

Section 15: Other Regulatory Information

EDTA calcium disodium salt (CAS: 62-33-9,39208-14-5,304695-78-1) is found on the following regulatory lists;

"Canada Domestic Substances List (DSL)", "Canada Ingredient Disclosure List (SOR/88-64)", "Canada Toxicological Index Service -Workplace Hazardous Materials Information System - WHMIS (English)", "International Council of Chemical Associations (ICCA) - High Production Volume List", "OECD Representative List of High Production Volume (HPV) Chemicals", "US Cosmetic Ingredient Review (CIR) Cosmetic ingredients found safe as used", "US Food Additive Database", "US Toxic Substances Control Act (TSCA) - Inventory"

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Last Updated: 2013.8.14 16:00 pm

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if we have been advised of the possibility of such damages.