

MATERIAL SAFETY DATA SHEET

EDTA-MN-13

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product label name Ethylenediaminetetraacetic acid, manganese disodium salt,.

Company: SICHUAN HIGHLIGHT FINE CHEMICALS CO., LTD./ DaeMyung chemical Corporation
187, Cheongwonsandan 3-gil, Mado-myeon, Hwaseong-si, Gyeonggi-do, Korea
T. +82-2-462-3857

2. COMPOSITION/INFORMATION ON INGREDIENTS

This product is to be considered as a substance in conformance to EC directives

Chemical description Ethylenediaminetetraacetic acid, manganese disodium

Composition / information on ingredients

Ingredients	% w/w	CAS-number
Manganese disodium EDTA	89-93	15375-84-5
Disodium EDTA	≈1.0	139-33-3
Nitrilotriacetic acid (NTA)	≈1.2	139-13-9
Water	0-10 (balance)	7732-18-5

3. HAZARDS IDENTIFICATION

Not classified as hazardous conform EEC Dangerous Substance Directive and Dangerous Preparation Directive

4. FIRST AID MEASURES

Symptoms and effects No typical symptoms and effects known.

First aid

General In all cases of doubt, or when symptoms persist, seek medical attention.

Inhalation Dust may be irritating to the respiratory tract and cause symptoms of bronchitis. Move to fresh air. If symptoms persist, seek medical advice

Skin Take off contaminated clothing immediately. Wash immediately with soap and water. Launder clothes before reuse.

Eye Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.

Ingestion Rinse mouth, give water to drink.

Advice to physician No additional information available

5. FIRE-FIGHTING MEASURES

Extinguishing media	In case of fire and/or explosion do not breathe fumes.
Unsuitable extinguishing Media	none known.
Special exposure hazards	In case of fire and/or explosion do not breathe fumes.
Hazardous decomposition/combustion products	Nitrous gases may be produced
Protective equipment	Use self-contained respiratory equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	For personal protection see Section 8
Environmental precautions reuse	Collect as much as possible in a clean container for (preferable) or disposal.
Methods for cleaning up vermiculite).	Flush remainder with water (Absorb the remainder with e. g.

7. HANDLING AND STORAGE

Handling	Avoid dust generation.
Fire and explosion Prevention	No specific recommendations
Storage requirements	No specific recommendations
Other information	Keep container tightly closed and dry. Product is hygroscopic.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	No specific recommendations
Exposure limits	No exposure limits have been established for this material
Personal protection	
Respiratory	In case of dust formation use dust mask.
Hand	Wear suitable gloves
Eye	Wear eye/face protection
Skin and body	The usual precautions for handling chemicals should be observed

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	powder (25 ⁰ C)
Colour	light beige
Odour	odourless
Boiling point/range	not relevant
Melting point/range	Decomposes without melting
Flash point	not relevant
Flammability	not relevant
Autoignition temperature	>260 ⁰ C

Sichuan Highlight Fine Chemicals Co., Ltd.

Explosive properties	not relevant
Oxidizing properties	not applicable
Vapour pressure	not relevant
Density	not relevant
Bulk density	approx. 625 kg/m ³
Solubility in water	800±2% g/l (20 ^o C) 1600 g/l (80 ^o C)
solubility in other solvents	not determined
pH value	pH approx. 6.5 (1 % solution)
Partition coefficient n-octanol/water	not determined
Relative vapour density (air=1)	not relevant
Viscosity	not relevant
Other information	decomposition temperature: >260 ^o C.

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage and handling conditions (see section 7)
Conditions to avoid	none know
Materials to avoid	none know
Hazardous decomposition Products	Nitrous gases may be produced

11. TOXICOLOGICAL INFORMATION

No experimental toxicological data of the product as such available. From structurally related products the following may be expected;

Oral LD50 rat: > 2000 mg/kg

12. ECOLOGICAL INFORMATION

No experimental ecological data are available on the preparation as such. From structurally related products the following may be expected;

Degradation Biotic Not readily biodegradable

13. DISPOSAL CONSIDERATIONS

Product	According to local regulations.
Contaminated packaging	No specific recommendations.

14. TRANSPORT INFORMATION

Land transport

ADR class	not restricted	ADR item number	not relevant
RID class	not restricted	RID item number	not relevant
Hazard Identification No.	none	Substance Identification No.	none
TREM-Card	not relevant	UN number	not relevant
Proper shipping name	not relevant		

National regulations

Other information

See transport

IMO/IMDG code	not restricted	Class	not restricted
Packing group	none	UN number	none
EMS	not relevant	MFAG	not relevant
Marine pollutant	no		
Proper shipping name	not relevant		
Other information			

Air transport

ICAO-TI-IATA-DGR		UN number	none
Class	not restricted	Packing group	none
Proper shipping name	not relevant		

Other information keep away from: aluminium +humidity / water

15. REGULATORY INFORMATION

Product label name Ethylenediaminetetraacetic acid, manganese disodium

Labelling according to EC directives

EC-number not applicable

Symbol (s) none

R (isk) phrase (s) none

S (afety) phrase (s) none

Other information

Wassergefährdungsklasse 2 (Internal assessment)

16. OTHER INFORMATION

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.