

MATERIAL SAFETY DATA SHEETMSDS No. EW042952
Issue Date: 2005/10/12

CODE: 042-29521, 044-29525

IDENTITY Disodium Edetate**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME : Disodium Edetate
 MANUFACTURER : Wako Pure Chemical Industries, Ltd.
 SUPPLIER : SUPPLIER(In JAPAN) : Wako Pure Chemical Industries, Ltd.
 ADDRESS : 1-2, Doshomachi 3-chome, Chuo-ku, Osaka, 540-8605, Japan
 TELEPHONE NUMBER & EMERGENCY TELEPHONE NUMBER: (06)6203-3741

SUPPLIER(In U.S.A.) : Wako Chemicals USA, Inc.
 ADDRESS : 1600 Bellwood Road, Richmond, VA 23237, U.S.A.
 TELEPHONE NUMBER : (804)271-7677
 EMERGENCY TELEPHONE NUMBER : (800)424-9300 (CHEMTREC)

SUPPLIER(In EUROPE) : Wako Chemicals GmbH, Germany
 ADDRESS : Nissanstrasse 2, D-41468 Neuss, GERMANY
 TELEPHONE NUMBER & EMERGENCY TELEPHONE NUMBER : (02131)311-0

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME : Ethylenediamine-N,N,N',N'-tetraacetic Acid Disodium Salt Dihydrate
 FORMULA : $C_{10}H_{14}N_2Na_2O_8H_2O$
 MOLECULAR WEIGHT : 372.24
 CAS NUMBER : 6381-92-6
 TSCA INVENTORY : Listed
 EINECS No. : 205-358-3
 IDENTIFICATION OF DANGER ;
 SYMBOL : -----
 R-phrases : -----

3. HAZARDS IDENTIFICATION

May be harmful if inhaled and ingested.
 May cause eye and skin irritation.

4. FIRST AID MEASURES

GENERAL ADVICE : Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.

INHALATION : Move victim to fresh air. If breathing is difficult, give oxygen. If irritation persists, consult a physician.

SKIN CONTACT : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.

EYE CONTACT : Remove any contact lenses at once. Flush eyes well with a large amount of running water for at least 15 minutes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.

INGESTION : Rinse mouth, give plenty of water to dilute the substance. Never give anything by mouth to an unconscious person. Consult a physician.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA : Carbon dioxide, dry chemical powder, foam, water
 FIRE & EXPLOSION HAZARDS : Toxic, irritating dust or smoke may be emitted.
 SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS : Firemen should wear normal protective equipment(full bunker gear)and positive-pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS : Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS : Prevent spills from entering sewers, watercourses or low areas.

METHODS FOR CLEAN UP : Do not touch spilled material without suitable protection(See section 8). After material is completely picked up, wash the spill site with soap and water and ventilate the area. Put all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or

dispose of contaminated clothing.

7. HANDLING AND STORAGE

Research use only.

HANDLING : Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Handle material with suitable protection.

STORAGE : Store away from sunlight in well-ventilated dry place at room temperature. Keep container tightly closed.

INCOMPATIBLE PRODUCTS : Oxidizers and acids

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES : Use exhaust ventilation to keep airborne concentrations below exposure limits. Use only with adequate ventilation.

VENTILATION : Local Exhaust ; Necessary, Mechanical(General) ; Recommended

PERSONAL PROTECTION :

Respiratory protection : Use a NIOSH/MSHA or European Standard EN149 approved respirator if the vapor concentrations exceed regulatory guidelines.

Hand protection : Chemical resistant gloves

Eye protection : Safety glasses(goggles)

Skin protection : Protective clothing

CONTROL PARAMETER :

OSHA Final Limits : None established

ACGIH TLV(s) : None established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : White crystals - crystalline powder

ODOR : Odourless

pH : 4.3-4.7 (1.0 g/100ml)

BOILING POINT : Not available

MELTING POINT : 245-250 ° C= 473-482 ° F (Dec.)

FLASH POINT : Not available

FLAMMABILITY (solid, gas) : Not available

DECOMPOSITION TEMPERATURE : Not available

EXPLOSIVE LIMITS : Not available

VAPOR PRESSURE : Not available

SPECIFIC GRAVITY : 1.01

SOLUBILITY IN ;

WATER : Soluble (111 g/L at 21 ° C= 69.8 ° F)

Soluble (270 g/L, at 98 ° C= 208.4 ° F)

ETHANOL : Practically insoluble

log Po/w : Not available

10. STABILITY AND REACTIVITY

CONDITION TO AVOID : Sunlight, heat

INCOMPATIBILITY(MATERIAL TO AVOID) : Oxidizers and acids

HAZARDOUS DECOMPOSITION PRODUCTS : Carbon monoxide, nitrogen oxides, sodium oxides, may be formed.

HAZARDOUS POLYMERIZATION : Will not occur.

11. TOXICOLOGICAL INFORMATION

as CAS No.139-33-3, Mutation Data: CAS No.6381-92-6

ACUTE TOXICITY DATA : LD50(oral, rat): 3.7gm/kg(IJOTO* 21,95,2002)

IRRITATION DATA : Not available

MUTATION DATA : Cytogenetic analysis; hamster; lung; 200mg/L(MUREAV 163,63,1986)

Reverse mutation assay in S.typhimurium and E.coli; Negative

REPRODUCTIVE EFFECTS DATA : TDLo(oral, rat): 31429mg/kg(female 1-22 D preg)(SCIEAS 173,62,1971)

TUMORIGENIC DATA : Not available

ADDITIONAL INFORMATION ;

NTP : Not listed

IARC : Not listed

OSHA : Not listed

ACGIH : Not listed

12. ECOLOGICAL INFORMATION

BIODEGRADABILITY : Not available

BIOACCUMULATION POTENTIAL : This material is not high bioaccumulatable.

AQUATIC TOXICITY : Not available

OTHER INFORMATION : WGK: 2

13. DISPOSAL CONSIDERATION

Burn in a chemical incinerator equipped with an afterburner and scrubber in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environmental agency for specific rules).

14. TRANSPORT INFORMATION

IATA : Not Restricted.
DOT(Department of Transportation) :Not a Hazardous Material for DOT shipping.

15. REGULATORY INFORMATION

US REGULATIONS ;
EPA : CERCLA RQ= Not listed
EPCRA TPQ= Not listed
OSHA :TQ= Not listed

EU REGULATIONS ;
SYMBOL : ----
R-phrases : ----
S-phrases : ----
EC index No. :Not listed

16. OTHER INFORMATION

No specific notes

The above information is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. This product is intended to be used by expert persons having chemical knowledge and skill, at their own discretion and risk and Wako shall not be held liable for any damageresulting from handling or from contact with the above material.