

MATERIAL SAFETY DATA SHEET - ORGANIC IODINE 40

This product contains the following ingredients that are reportable under the Occupational Safety and Health Administration's Hazard Communication Standard, (29 CFR 1910.1200).

ETHYLENEDIAMINE DIHYDRIODIDE
SALT

Material Safety Data Sheets for each of these ingredients are attached to serve as the Material Safety Data Sheet for ORGANIC IODINE 40.

Date Prepared: 2/25/99

SECTION 1 - IDENTIFICATION

MANUFACTURER: DEEPWATER CHEMICALS, INC., 1210 Airpark Road, Woodward, Oklahoma 73801

EMERGENCY PHONE NUMBER: (800) 854-4064 or CHEMTREC (800) 424-9300

EFFECTIVE DATE: 4/4/89

REVISED DATE: 10/12/95

CHEMICAL NAME: Ethylenediamine Dihydriodide

TRADE NAME: EDDI

CAS NUMBER: 5700-49-2

CHEMICAL FAMILY: Amine salt

CHEMICAL FORMULA: C₂H₆N₂-2HI

FORMULA WEIGHT: 313.91

SECTION 2 - HAZARDOUS INGREDIENTS

HAZARDOUS COMPONENTS: Ethylenediamine Dihydriodide; HAZARDOUS: 99%; PROD.
CAS #: 5700-49-2; TLV (units): Not established.

SECTION 3 - PHYSICAL DATA

BOILING POINT: NA

FREEZING POINT: NA

VOLATILITY / VOL (%): NA

VAPOR PRESSURE: NA

VAPOR DENSITY (Air = 1): NA

SOLUBILITY IN H₂O: Greater than 50% by weight

APPEARANCE/ODOR: Colorless to light yellow, crystalline powder

SPECIFIC GRAVITY(H₂O=1): Not determined
EVAPORATION RATE (H₂O=1): NA
pH: 4.5 - 5 for a 5% aqueous solution

SECTION 4 - FIRE AND EXPLOSION DATA

FLASH POINT: NA
LOWER FLAME LIMIT: NA
HIGHER FLAME LIMIT: NA
EXTINGUISH MEDIA: Carbon dioxide, dry chemical powder, foam.
FOR FIRE: Wear a self-contained breathing apparatus.
USUAL FIRE HAZARD: While ethylenediamine dihydriodide is not flammable, toxic iodine vapor may be liberated during a fire.

SECTION 5 - HEALTH HAZARD DATA

HEALTH HAZARDS: Dust is irritating to the respiratory tract. Skin contact may cause an allergic response. Contact with moist skin may result in minor burns.
TOXICITY DATA: Not established
CARCINOGENICITY: Not reported
MUTAGENICITY: Not reported
REPRODUCTIVE EFFECTS: None reported
TERATOGENICITY: Not reported
OVER EXPOSURE EFFECTS: Prolonged exposure may cause skin rash, irritation of the respiratory tract, and headache. Some individuals are extremely susceptible to an allergic response following exposure to iodides.
FIRST AID PROCEDURES:
EYE CONTACT: Rinse with water for at least 15 minutes.
SKIN CONTACT: Immediately wash thoroughly with soap and water. Remove contaminated clothing.
INGESTION: Drink a large quantity of water to dilute the salt.
INHALATION: Remove to fresh air and support breathing as necessary.

SECTION 6 - REACTIVITY DATA

CHEMICAL STABILITY: Stable
CONDITION TO AVOID: Strong oxidizing agents and strong alkali
INCOMPATIBLE MATERIALS: Strong oxidizing agents, alkaline materials, and moist copper salts.
DECOMPOSITION PRODUCTS: While generally stable, exposure to strong oxidizing agents or sunlight in a moist environment may result in the liberation of iodine.
HAZARDOUS POLYMERIZATION: Will not occur
POLYMERIZATION AVOID: NA

SECTION 7 - SPILL OR LEAK PROCEDURE

FOR SPILL: Sweep up the solid crystals, place in a container, and either recycle or dispose of in an approved method.

WASTE DISPOSAL METHOD: Burn in a chemical incinerator equipped with an afterburner and scrubber. Contact the manufacturer concerning recycle possibilities.

SECTION 8 - SPECIAL PROTECTION

RESPIRATORY PROTECTION: Wear a NIOSH/MSHA approved dust mask.

VENTILATION: Local exhaust

PROTECTIVE GLOVES: Rubber or plastic gloves

EYE PROTECTION: Chemical safety glasses or goggles

OTHER PROTECTIVE EQUIPMENT: None required

HANDLING AND STORAGE: Store in a cool (<100°F), dark place. Do not expose to direct sunlight. Do not store in open, unlabeled containers.

SECTION 9 - SPECIAL PRECAUTIONS

SPECIAL SHIPPING INFORMATION: None required

HAZARD CLASS: Not hazardous

DOT SHIPPING NAME: Ethylenediamine Dihydriodide

REPORTABLE QUANTITY (RQ): Not established

UN NUMBER: None

PACKAGING SIZE: 100 pound or 50 kg drums

SECTION 10 - PREPARATION OF MSDS

PREPARED BY: D.G. Mason

PHONE NUMBER OF PREPARER: (405) 256-0500

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Deepwater Chemicals shall not be held liable for any damage resulting from handling or from contact with the above product.

SECTION 1 - GENERAL INFORMATION

MANUFACTURER: Cargill Incorporated - Salt Division, P.O. Box 5621, Minneapolis, MN 55440

GENERAL SERVICES ADMINISTRATION NATIONAL STOCK NUMBER: 6810-00-227-0437

CONTACT: Director-Quality Admin.

PHONE NO: (612) 742-6581

TRADE NAME (Common Name or Synonym): Salt

C.A.S. NO(S): 7647-14-5

CHEMICAL NAME (S): Sodium Chloride

FORMULA: NaCl

MOLECULAR WEIGHT: 58.44

DATE ISSUED: 8/1/85

DATE REVISED: 4/28/93

SECTION 2 - HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

None

THIS PRODUCT IS NOT REGULATED UNDER:

OSHA Hazard Communication Standard 29 CFR 1910.1200

S.A.R.A. Title III

SECTION 3 - PHYSICAL / CHEMICAL CHARACTERISTICS

BOILING POINT (760 mm Hg)(°C): 1465

VAPOR PRESSURE (mm Hg / 747°C): 2.4

VAPOR DENSITY (Air =1): NA

SOLUBILITY IN WATER (g/cc,%): 26.4

SPECIFIC GRAVITY (H₂O = 1): 2.16

MELTING POINT (°C): 801

EVAPORATION RATE (Butyl Acetate = 1): NA

APPEARANCE AND ODOR: White crystalline solid with slight halogen odor.

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used): NA

FLAMMABLE LIMITS: LEL: NA; UEL: NA

EXTINGUISHING MEDIA: NA. This product is nonflammable.

SPECIAL FIRE-FIGHTING PROCEDURES / EQUIPMENT: NA

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

SECTION 5 - REACTIVITY DATA

STABILITY: Stable

CONDITIONS TO AVOID: Contact with strong acids.

INCOMPATIBILITY (Materials to Avoid): Becomes corrosive to metals when wet.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: May evolve chlorine gas when in contact with strong acids.

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS TO AVOID: NA

SECTION 6 - HEALTH HAZARD DATA

ROUTE(S) OF ENTRY

INHALATION: May cause mild irritation of nose and throat.

SKIN: Dust may cause mild irritation.

INGESTION: Ingestion of large amounts may cause gastrointestinal upset.

HEALTH HAZARDS (Acute and Chronic): Ingestion of large amounts (greater than 0.1 pound) can cause gastrointestinal upset and irritation of the stomach.

No applicable information found for chronic systemic effects.

CARCINOGENICITY:

NTP? Not listed as a carcinogen or mutagen.

IARC Monographs? Not listed as a carcinogen or mutagen.

OSHA Regulated? Not listed as a carcinogen or mutagen.

SIGNS AND SYMPTOMS OF EXPOSURE

INHALATION: Slight irritation of the nose; sneezing.

SKIN CONTACT: Irritation; inflammation.

INGESTION: Nausea; vomiting.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: In some cases of confirmed hypertension, ingestion may result in elevated blood pressure. (This applies only to salt-sensitive individuals.)

EMERGENCY AND FIRST AID PROCEDURES

INHALATION: If person breathes large quantities, remove to fresh air at once. If breathing stops, apply artificial respiration immediately.

SKIN CONTACT: Remove clothing from affected area. Wash skin thoroughly. Rinse carefully. For eye contact, flush with water immediately, lifting eyelids occasionally.

INGESTION: Less than a few grams would not be harmful. For larger quantities, drink large amounts of water or milk.

EMERGENCY TELEPHONE NUMBERS: Daytime (612) 475-6581 - Evenings (612) 476-1127 (Minnesota)

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Contain spills to prevent contamination of water supply or sanitary sewer system. Vacuum or sweep into containers for proper disposal.

WASTE DISPOSAL METHOD: For disposal of this material as a waste, act in accordance with all applicable Federal, state and local waste management regulations.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: Avoid humid or wet conditions as product will cake and become hard.

OTHER PRECAUTIONS: NA

SECTION 8 - CONTROL MEASURES

RESPIRATORY PROTECTION (Specify Type): NIOSH/MSHA approved respirator for particulates.

VENTILATION: LOCAL EXHAUST: Ventilate as required to maintain airborne particulates below occupational exposure limits. **MECHANICAL (General):** Dust collection equipment may be employed. **SPECIAL / OTHER:** NA

PERSONAL PROTECTIVE EQUIPMENT

PROTECTIVE GLOVES: Normal work gloves are adequate.

EYE PROTECTION: Eyeglasses or goggles should be worn in dusty areas.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Protective clothing may be worn in dusty areas, but is generally not required.

WORK/HYGIENE PRACTICES: Warm water showering and handwashing is suggested after working in extremely dusty areas.

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