Material safety data sheet

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION Catalog Numbers: 95045 Catalog Name: 0.02mol/L Ethylenediaminetetraacetic acid solution Company Identification: Junsei Chemical Co., Ltd. 4-16, 4-Chome, Nihonbashi-Honcho, Tokyo, 103-0023 Japan Web: http://www.junsei.co.jp/ E-mail: eihon@junsei.co.jp EMERGENCY TELEPHONE NUMBER: Production Headquarters Phone: +81-3-3270-5411 FAX: +81-3-3241-8298 E-mail: shiyaku@junsei.co.jp CREATION DATE: June 7, 2002 -----COMPOSITION, INFORMATION ON INGREDIENTS Ingredient 1 Chemical name: Ethylenediaminetetraacetic acid Synonyms: EDTA Molecular Formula: C10H16N2O8 Molecular Weight: 292.24 CAS NUMBER: 60-00-4 EC NUMBER (EINECS):200-449-4 JAPAN NUMBER (ENCS):2-1296, 2-1263 Content: ca.0.6% Ingredient 2 Chemical name: Water CAS NUMBER: 7732-18-5 EC NUMBER (EINECS): 231-791-2 Content: ca.99% HAZARDS IDENTIFICATION SECTION 3

EMERGENCY OVERVIEW

Irritating to eyes, respiratory system and skin.

Potential Health Effects

Eye:

Causes eye irritation.

Skin:

Causes skin irritation.

Ingestion:

Not available.

Inhalation:

Causes respiratory tract irritation.

Chronic:

No information found.

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SECTION 4 FIRST AID MEASURES

Eves:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin:

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

Ingestion:

Treat symptomatically and supportively. Get medical aid immediately. Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician:

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SECTION 5 FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

SECTION 6 ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container.

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SECTION 7 HANDLING AND STORAGE

Handling:

Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.

Storage:

Store in a cool, dry place. Store in a tightly closed container.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

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Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Personal Protective Equipment

Eyes:

Wear chemical goggles.

Skin:

Wear appropriate protective gloves to prevent skin

exposure.

Clothing:

Wear a chemical apron.

Respirators:

A NIOSH/MSHA approved air purifying dust or mist

respirator or European Standard EN 149.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State: liquid
Appearance: colorless
Odor: odorless
pH: Not available.
Vapor Pressure: Negligible.
Viscosity: Not available.
Boiling Point: 100 deg C.

Freezing/Melting Point: 0 deg C Autoignition Temperature: Not available.

Flash Point: none

Explosion Limits, lower: Not available. Explosion Limits, upper: Not available.

Decomposition Temperature: Not available

Solubility: soluble Specific Gravity/Density: ca. 1g/cm3

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SECTION 10 STABILITY AND REACTIVITY

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Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions. Decarboxylates above 150C.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong bases, aluminum, copper, copper alloys, nickel.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide, ammonia and/or derivatives.

Hazardous Polymerization: Has not been reported.

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SECTION 11 TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 60-00-4: AH4025000

LD50/LC50:

CAS# 60-00-4: Oral, mouse: LD50 = 30 mg/kg.

Carcinogenicity:

Ethylenediaminetetraacetic acid, reagent ACS -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Other:

See actual entry in RTECS for complete information.

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SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

Fish toxicity: LC50 (96hr) bluegill sunfish, channel catfish 129-159 mg/l; LC50 (24hr) rainbow trout 340 mg/l Invertebrate toxicity: LC50 (24hr) Artemia salina 200 and 280 mg/l for saltwater and freshwater, respectively (Jarcovic,M. et al Arch.Fischereiwiss.1969,20,178-181). Toxicity threshold, cell multiplication inhibition Pseudomonas putida 105 mg/l, Scendesmus quadricauda 11 mg/l, Entosiphon sulcatum 36 mg/l (Bringmann,G. et al Water Res. 1980,14,231-241).

SECTION 13 DISPOSAL CONSIDERATIONS

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Dispose of in a manner consistent with federal, state, and local regulations.
         TRANSPORT INFORMATION
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    IATA
        Not regulated as a hazardous material.
    IMO
        Not regulated as a hazardous material.
   RID/ADR
        Not regulated as a hazardous material.
SECTION 15
           REGULATORY INFORMATION
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European/International Regulations
    European Labeling in Accordance with EC Directives
        Hazard Symbols: XI
        Risk Phrases:
                  R 36/37/38 Irritating to eyes, respiratory system
                  and skin.
        Safety Phrases:
                  S 26 In case of contact with eyes, rinse immediately
                  with plenty of water and seek medical advice.
                  S 37/39 Wear suitable gloves and eye/face
                  protection.
  WGK (Water Danger/Protection)
        CAS# 60-00-4: 2
  United Kingdom Occupational Exposure Limits
  Canada
        CAS# 60-00-4 is listed on Canada's DSL List.
        CAS# 60-00-4 is not listed on Canada's Ingredient Disclosure List.
  Exposure Limits
US FEDERAL
   TSCA
        CAS# 60-00-4 is listed on the TSCA inventory.
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         OTHER INFORMATION
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