national diagnostics

Conforms to regulation (EC) no. EU 453/2010

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Product Name: EDTA, 0.5M solution

Product Number: EC-900

1.2 Relevant Identified Uses of the Substance/Mixture and Uses Advised Against Investigational research by professional users

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer National Diagnostics 305 Patton Drive Atlanta, GA 30036 (404) 699-2121 (800) 526-3867 info@nationaldiagnostics.com

1.4 Emergency Telephone Number

ChemTel Inc.

Contract number MIS8894340 1-800 255-3924 (United States, Canada, Puerto Rico & US Virgin Islands) 01-800-099-0731 (Mexico) 400-120-0751 (China) 000-800-100-4086 (India) 1-300-954-583 (Australia) 0-800-591-6042 (Brazil) +1-813-255-3924 (All other regions)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture Classification according to Regulation (EC) No. 1272/2008 [EU-GHS/CLP] Skin Corrosion/Irritation (Category 1A)

2.2 Label Elements

GHS LABEL ELEMENTS AND CLASSIFICATION GHS Label Elements



WARNING

H315-Causes skin irritation. H319-Causes serious eye irritation. H335-May cause repiratory irritation. P280-Wear protective gloves/protective clothing/eye protection/face protection. P302+P352-IF ON SKIN: Wash with plenty of soap and water. P304+P340-IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+P351+P338-IF IN EYES-Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.

2.3 Other Hazards

None found.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixture

Chemical Names/Description

Ethylenediamineetetraacetic acid, disodium salt solution.

Component List

Component	% Comp.	CAS #	EC #	1278/2008 Classification
Ethylenediaminetetraacetic acid, disodium salt	18.6	6381-92-6	205-358-3	H332
dihydrate				

SECTION 4 - FIRST AID MEASURES 4.1 Description of First Aid Measures Inhalation Move to fresh air. Give oxygen if breathing becomes difficult.

Ingestion

Clean mouth with water and afterwards drink plenty of water.

Skin

Wash off immediately with soap and water, removing all contaminated clothes and shoes.

Eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

Inhalation

Symptoms may include coughing or sneezing.

Ingestion

Nausea.

Skin

Reddening or inflammation on prolonged contact.

Eyes

Pain, redness, blurred vision.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

Unknown/not applicable

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishing media

Dry chemical, CO2, water spray or regular foam.

5.2 Special Hazards Arising from the Substance/Mixture

Hazardous Combustion Products Carbon oxides, nitrogen oxides.

Hazardous Decomposition Products

None.

Hazardous Polymerization

Does not occur.

5.3 Advice for Firefighters

As with any fire, wear self-contained breathing apparatus pressure demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

5.4 Further Information

No data available.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

Avoid contact with skin, eyes and clothing. Use personal protective equipment. Operate in well ventilated area.

6.2 Environmental Precautions

Prevent discharge into the environment. Dike spills and stop leakage where practical. Do not allow material to enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Contain and clean up spill immediately, prevent from entering floor drains. Contain liquids using absorbents. Shovel all spill materials into disposal drum. Scrub spill area with detergent, flush with copious amounts of water.

6.4 References to Other Sections

For disposal information, see Section 13. For protective clothing and equipment, see Section 8.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for Safe Storage (including any incompatibles)

Keep containers tightly closed in a dry, cool and well ventilated place.

Incompatibles

Strong acids and strong oxidizing agents.

7.3 Specific End Uses

Investigational research by professional users

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PRECAUTIONS

8.1 Control Parameters

ACGIH Threshold Limit Value (TLV): None Established OSHA Permissible Exposure Limit (PEL): None established

8.2 Exposure Controls

Engineering Controls

Showers, eyewash stations, ventilation systems.

Respiratory Protection

If exposure limits are exceeded or you experience irritation, wear NIOSH/MSHA approved gloves. Positive-pressure supplied air respirators may be needed for high airborne contaminant

Eye Protection

Tightly fitting safety goggles.

Skin Protection

Protective gloves/clothing.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical & Chemical Properties

a. Appearance	Clear, colorless solution	b. Odor	None
c. Odor Threshold	N.A.	d. pH	8
e. Melting/Freezing Point (^o C)	0	f. Boiling point (^o C)	101
g. Flash Point (^o C)	N.A.	h. Evaporation Rate	Water
i. Flammability	N.A.	j. Upper/Lower Flammability or Explosive Limits	N.A.
k. Vapor Pressure	17	I. Vapor Density (Air = 1)	0.62
m. Relative Density	1.01	n. Water Solubility	Miscible
o. Partition Coefficient n-octanol/water	Mixture	p. Autoignition Temperature (^o C)	N.A.
q. Decomposition Temperature (^o C)	N.A.	r. Viscosity	
s. Explosive Properties	N.A.	t. Oxidizing Properties	N.A.

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

N.A.

10.2 Chemical Stability

Stable under recommended storage conditions.

10.3 Possibility of Hazardous Reactions

Does not occur.

10.4 Conditions to Avoid

None known.

10.5 Incompatible Materials

Strong acids and strong oxidizing agents.

10.6 Hazardous Decomposition Products None.

SECTION 11 - TOXICOLOGICAL INFORMATION

Product LD50 Values

Oral Rat LD50 (mg/kg)

N.A.

Dermal Rabbit LD50 (mg/kg) N.A.

Component Cancer List Status

	NTP Ca		
	Known	Anticipated	IARC Category
Ethylenediaminetetraacetic acid, disodium salt dihvdrate	No	No	none

Potential Health Effects

Inhalation

Mild irritant. May cause irritation to the respiratory tract.

Ingestion

Substance has low toxicity by ingestion. Large amounts may cause gastric upset due to osmotic imbalance through the sequestering of metal ions.

Skin

Mild skin irritant.

Eyes

Causes irritation. Solutions are severe irritants to the eye. Possible corneal burns.

Carcinogenicity

The trisodium salt of EDTA did not cause cancer in laboratory animals. This product may contain trace amounts of nitriolotriacetic acid which is listed in the NTP report on carcinogens as anticipated to be a carcinogen.

Mutagenicity

Tests on laboratory animals indicate material may be mutagenic.

Reproductive Toxicity

No information found.

Teratogenic Effects

No information found.

Routes of Entry

Inhalation or ingestion. Not likely to be absorbed through the skin in harmful amounts.

Target Organ Statement

Bladder, kidneys.

SECTION 12 - ECOLOGICAL INFOMATION

12.1 Toxicity

	Vertebrates	Invertebrates	Algae	Microorganisms
Aquatic Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data
	Birds	Arthropods	Plants	Microorganisms
Terrestrial Environment Toxicity (ppm unless otherwise noted)	No data	No data	No data	No data

12.2 Persistence and Degradability

No data

12.3 Bioaccumulative Potential

No data

12.4 Mobility in Soil

No data

12.5 Results of PBT and vPvB Assessment No data

12.6 Other Adverse Effects

None

SECTION 13 - DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Offer surplus or non-recyclable product to licensed disposal company. Disposal is subject to user compliance with applicable law and product characteristics at time of disposal. Dispose of packaging as product.

SECTION 14 - TRANSPORT INFORMATION

	ADR/RID	IATA	IMO	DOT
14.1 UN Number	N.A.	N.A.	N.A.	N.A.
14.2 Shipping Name	N.A.	N.A.	N.A.	N.A.
14.3 Hazard Class	N.A.	N.A.	N.A.	N.A.
14.4 Packing Group	N.A.	N.A.	N.A.	N.A.
14.5 Environmental Hazards	N.A.	N.A.	N.A.	N.A.
14.6 Special Precautions	N.A.	N.A.	N.A.	N.A.

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance/Mixture

United States TSCA Regulatory Statement

All intentional ingredients are listed on the TSCA Inventory.

SARA 311/312 Hazard Categories Component	Fire	Pressure	Reactivity	Acute	Chronic
Ethylenediaminetetraacetic acid, disodium salt dihydrate	No	No	No	Yes	No

Europe

EEC Regulatory N.A.

SECTION 16 - OTHER INFORMATION

Revisional Updates

4/26/2019 - Updated Section 1.4 5/29/2015 - Updated Sections 2.1 and 3.2 4/16/2013 - Released Version 1.0

NFPA Codes

Health 0 Flammability 0 Reactivity 0

Dangers

Ethylenediaminetetraacetic acid, disodium salt dihydrate H332 - Harmful if inhaled.

MANUFACTURER DISCLAIMER: The information given herein is offered in good faith as accurate, but without guarantee. Conditions of the use and suitability of the product for particular uses are beyond our control. All risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.