MATERIAL SAFETY DATA SHEET (MSDS)



PRODUCT NAME- ETHYLENE DIAMINE TETRA ACETIC ACID DISODIUM SALT CAS No.: 6381-92-6

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1. Product identifier Product form : SUBSTANCE Product name ETHYLENE DIAMINE TETRA ACETIC ACID DISODIUM SALT Type of product : BUFFER Product Grades (Applicable) E0024A (Pack size(s) :- 0.5KG, 1KG, 5KG, 25KG E0024L (Pack size(s) :- 0.5KG, 1KG, 5KG, 25KG E0024H (Pack size(s) :- 0.5KG, 1KG Product Code : E0024 CAS No 6381-92-6 Formula : C10H14N2Na2O8 · 2H2O 1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. Relevant identified uses : Industrial For professional use only 1.2.2. Uses advised against No additional information available : 1.3. Details of the supplier of the safety data sheet **RYZE CHEMIE** W-68, Mankivli MIDC Badlapur (E), Thane, Maharashtra-421503 www.ryzechemie.com 1.4. Emergency Telephone Number +91-99-3006-04-04 ÷ **SECTION 2: Hazards Identification**

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified

Adverse physicochemical, human health and environmental effects No additional information available

2.2. Label Elements

No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substance	
Name	ETHYLENE DIAMINE TETRA ACETIC ACID DISODIUM SALT
CAS-No.	6381-92-6
EC-No	NA
EC Index-No.	NA

3.2. Mixture

Not applicable

SECTION 4: : First aid measures	
4.1. Description of first aid measures	
First-aid measures general	 Remove person to fresh air and keep comfortable for breathing. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after inhalation	 Wash with plenty of water/ Wash contaminated clothing before reuse. Wash skin with plenty of water.
First-aid measures after skin contact	breathing. Immediately call a POISON CENTER/doctor.
First-aid measures after eye contact	 Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention.
First-aid measures after ingestion	 Rinse mouth. Do not induce vomiting. Get medical advice/ attention. Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed		
Symptoms/effects	:	Not applicable
SymptoSymptoms/effects after inhalation	:	Not applicable
Symptoms/effects after skin contact		Not applicable
Symptoms/effects after ingestion		Not applicable
SymptoSymptoms/effects after eye contact	:	Not applicable

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically

5.1. Extinguishing media

Suitable extinguishing media Unsuitable extinguishing media : Water spray. Dry powder. Carbon dioxide. Foam.

: Do not use a heavy water stream.

5.2. Special hazards arising from the subst	ance or mixture
Fire hazard	: No additional information available.
Explosion hazard	 No additional information available.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.
5.3. Advice for firefighters	
Protection during firefighting	Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
SECTION 6: Accidental release measu	res
6.1. Personal precautions, protective equip	mont and omorgoney procedures
General measures	: Remove ignition sources. Use special care to avoid static
	electric charges. No open flames. No smoking.
6.1.1. For non-emergency personnel	
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel.
6.1.2. For emergency responders	
Protective equipment	 Do not attempt to take action without suitable protective equipment. Use personal protective equipment as required. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area.
6.2. Environmental precautions	
Avoid release to the environment.	
6.3. Methods and material for containment	and cleaning up
	Mechanically recover the product. Collect spillage. On land,

0.5. Methods and material for containment and		
Methods for cleaning up	:	Mechanically recover the product. Collect spillage. On land,
		sweep or shovel into suitable containers.
Other information	:	Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed :	No additional information available.
Precautions for safe handling :	Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapours. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures :	Wash hands and other exposed areas with mild soap and

water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities			
Technical measures	:	No additional information available.	
Storage conditions	:	Keep container tightly closed. Store in a well-ventilated	
		place. Keep cool.	
Packaging materials	:	No additional information available.	

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values No additional information available

8.1.2. Recommended monitoring procedures No additional information available

8.1.3. Air contaminants formed No additional information available

8.1.4. DNEL and PNEC No additional information available

8.1.5. Control banding No additional information available

8.2. Exposure controls	
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Hand protection Eye protection Skin and body protection Respiratory protection : Protective gloves

: Chemical goggles or face shield

: Wear fire/flame resistant/retardant clothing

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties			
Physical state	: Solid		
Appearance	Crystalline powder.		
Molecular mass	: 372.24 g/mol		
Colour	: White.		
Odour	: Odourless.		
Odour threshold	: No data available		
рН	: 4 – 5 (5% Solution in water at 25°C)		
pH solution concentration	: No data available		
Relative evaporation rate	: No data available		

Freezing point:No data availableBoiling point:No data availableFlash point:> 100 °C
Flash point:> 100 °C
Auto-ignition temperature : > 252 °C
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapour pressure : No data available
Relative vapour density at 20 °C : No data available
Relative density : No data available
Density : No data available
Relative gas density : No data available
Solubility : Water: 100 g/l at 20 °C
Partition coefficient n-octanol/water (Log Pow) : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : No data available

9.2. Other information

9.2.1. Information with regard to physical hazard classes				
Explosion limits	: No add	itional information available		
9.2.2. Other safety characteristics				
Relative evaporation rate	: No add	itional information available		
Miscibility	: No add	itional information available		
Refractive index	: No add	itional information available		

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical Stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. fume.

SECTION 11: Toxicological information

11.1. Information on toxicological effects	
Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	Not classified
Skin corrosion/irritation	: pH: 4 – 5 (5% Solution in water at 25°C)
Serious eye damage/irritation	: pH: 4 – 5 (5% Solution in water at 25°C)
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	: Not classified
Potential adverse human health	: Not classified
effects and symptoms	

SECTION 12: Ecological information

12.1. Toxicity	
Ecology - general	 The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Ecology - Water	No additional information available
Hazardous to the aquatic environment, short–term(acute)	: No additional information available
Hazardous to the aquatic environment, long–term (chronic)	: No additional information available

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12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

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No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

No additional information available

SECTION 13:	Disposal	considerations
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13.1. Waste treatment methods

Waste treatment methods

Sewage disposal recommendations

Product/Packaging disposal recommendations

- Dispose of contents/container in accordance with licensed collector's sorting instructions. 2
 - No additional information available

Additional information	:	Dispose of contents/container to a licensed hazardous -waste disposal contractor or collection site except for empty clean containers which can be disposed of as nonhazardous waste.
SECTION 14: Transport information		
In accordance with ADR / RID / IMDG / IATA / ADN		
14.1. UN number		
UN-No. (ADR)	:	Not regulated
UN-No. (IMDG)	:	Not regulated
UN-No.(IATA)	:	Not regulated
UN-No.(ADN)	:	Not regulated
UN-No. (RID)	:	Not regulated
14.2. UN proper shipping name		
Proper Shipping Name (ADR)	:	Not regulated
Proper Shipping Name (IMDG)	:	Not regulated
Proper Shipping Name (IATA)	:	Not regulated
Proper Shipping Name (ADN)	:	Not regulated
Proper Shipping Name (RID)	:	Not regulated
Transport document description (ADR)	:	Not regulated
Transport document description (IMDG)	:	Not regulated
Transport document description (IATA)		Not regulated
Transport document description (ADN)		Not regulated
Transport document description (RID)	:	Not regulated
14.3. Transport hazard class(es)		
ADR		
Transport hazard class(es) (ADR)	:	Not regulated
Danger labels (ADR)	:	Not regulated
IMDG		
Transport hazard class(es) (IMDG)	:	Not regulated
Danger labels (IMDG)	:	Not regulated
ΙΑΤΑ		
Transport hazard class(es) (IATA)	:	Not regulated
Hazard labels (IATA)	:	Not regulated
ADN		
Transport hazard class(es) (ADN)	:	Not regulated
Hazard labels (ADN)	:	Not regulated
RID		
Transport hazard class(es) (RID)		
	•	Not regulated
Hazard labels (RID)	:	Not regulated

Packing group (ADR)	:	Not regulated
Packing group (IMDG)	:	Not regulated
Packing group (IATA)	:	Not regulated
Packing group (ADN)	:	Not regulated
Packing group (RID)	:	Not regulated

14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
Other information	:	No supplementary information available

:

14.6. Special precautions for user

Overland transport

Classification code (ADR)	:	Not regulated
Limited quantities (ADR)	:	Not regulated
Excepted quantities (ADR)	:	Not regulated
Packing instructions (ADR)	:	Not regulated
Special packing provisions (ADR)	:	Not regulated
Mixed packing provisions (ADR)	:	Not regulated
Portable tank and bulk container instructions (ADR) Portable tank and bulk container special	:	Not regulated
provisions (ADR)	:	Not regulated
Tank code (ADR)	:	Not regulated
Vehicle for tank carriage	:	Not regulated
Transport category (ADR)	:	Not regulated
Special provisions for carriage - Bulk (ADR)	:	Not regulated
Special provisions for carriage - Loading, unloading and handling (ADR)	:	Not regulated
Special provisions for carriage - Operation (ADR)	:	Not regulated
Hazard identification number (Kemler No.)	:	Not regulated
Orange plates	:	Not regulated
Tunnel restriction code (ADR)	:	Not regulated
EAC code	:	Not regulated
- Transport by sea		
Limited quantities (IMDG)	:	Not regulated
Excepted quantities (IMDG)	:	Not regulated
Packing instructions (IMDG)	:	Not regulated
IBC packing instructions (IMDG)	:	Not regulated
Tank instructions (IMDG)	:	Not regulated
Tank special provisions (IMDG)	:	Not regulated
EmS-No. (Fire)	:	Not regulated

EmS-No. (Spillage) Stowage category (IMDG) Properties and observations (IMDG) MFAG-No - Air transport	:	Not regulated Not regulated Not regulated Not regulated
PCA Excepted quantities (IATA)	:	Not regulated
PCA Limited quantities (IATA)	:	Not regulated
PCA limited quantity max net quantity (IATA)	:	Not regulated
PCA packing instructions (IATA)	:	Not regulated
PCA max net quantity (IATA)	:	Not regulated
CAO packing instructions (IATA)	:	Not regulated
CAO max net quantity (IATA)	:	Not regulated
ERG code (IATA)	:	Not regulated
 Inland waterway transport 		
Classification code (ADN)	:	Not regulated
Limited quantities (ADN)	:	Not regulated
Excepted quantities (ADN)	:	Not regulated
Equipment required (ADN)	:	Not regulated
Special provisions (AND)	:	Not regulated
Number of blue cones/lights (ADN)	:	Not regulated
- Rail transport		
Classification code (RID)	:	Not regulated
Limited quantities (RID)	:	Not regulated
Excepted quantities (RID)	:	Not regulated
Packing instructions (RID)	:	Not regulated
Mixed packing provisions (RID)	:	Not regulated
Special provisions (RID)		Not regulated
Portable tank and bulk container instructions	•	Not regulated
(RID)	:	Not regulated
Portable tank and bulk container special provisions (RID)	:	Not regulated
Tank codes for RID tanks (RID)	:	Not regulated
Transport category (RID)	:	Not regulated
Colis express (express parcels) (RID)	:	Not regulated
Hazard identification number (RID)	:	Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture 15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

No REACH Annex XVII restrictions

ETHYLENE DIAMINE TETRA ACETIC ACID DISODIUM SALT EXTRA PURE is not on the REACH Candidate List ETHYLENE DIAMINE TETRA ACETIC ACID DISODIUM SALT EXTRA PURE is not on the REACH Annex XIV List ETHYLENE DIAMINE TETRA ACETIC ACID DISODIUM SALT EXTRA PURE is not subject to Regulation

(EU) No 649/2012 of the European Parliament and of the Council of 4 july 2012 concerning the export and import of hazardous chemicals.

ETHYLENE DIAMINE TETRA ACETIC ACID DISODIUM SALT EXTRA PURE is not subject to Regulation (EU) No 2019/1021 of the European

Parliament and of the Council of 20 June 2019 on persistent organic pollutants

REACH Candidate List (SVHC)

Not applicable

PIC Regulation (Prior Informed Consent)

Not applicable

POP Regulation (Persistent Organic Pollutants) Not applicable

Ozone Regulation (1005/2009)

Not applicable

Explosives Precursors Regulation (2019/1148) Not applicable

Drug Precursors Regulation (273/2004)

Not applicable

15.1.2. National regulations

Germany

:	Water hazard class (WGK) 1, slightly hazardous to water (Classification according to AwSV, Annex 1) Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
:	The substance is not listed
:	The substance is not listed
:	The substance is not listed
:	The substance is not listed
:	The substance is not listed
:	Emergency management guidelines for the storage of flammable liquids must be followed
:	Young people below the age of 18 years are not allowed to use the product
	: : : : : :

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and a	Abbreviations and acronyms		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road		
ATE	Acute Toxicity Estimate		
BCF	Bioconcentration factor		
BLV	Biological limit value		
BOD	Biochemical oxygen demand (BOD)		
COD	Chemical oxygen demand (COD)		
DMEL	Derived Minimal Effect level		
DNEL	Derived-No Effect Level		
EC-No.	European Community number		
EC50	Median effective concentration		
EN	European Standard		
IARC	International Agency for Research on Cancer		
IATA	International Air Transport Association		
IMDG	International Maritime Dangerous Goods		
LC50	Median lethal concentration		
LD50	Median lethal dose		
LOAEL	Lowest Observed Adverse Effect Level		
NOAEC	No-Observed Adverse Effect Concentration		
NOAEL	No-Observed Adverse Effect Level		
NOEC	No-Observed Effect Concentration		
OECD	Organisation for Economic Co-operation and Development		
OEL	Occupational Exposure Limit		
РВТ	Persistent Bioaccumulative Toxic		
PNEC	Predicted No-Effect Concentration		
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail		

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.