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MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: E.D.T.A N/10 SOLUTION

CAS Number: **NA**

1. IDENTIFICATION:		
Product Code	: 91733	
Company Name	: ADVENT CHEMBIO PRIVATE LIMITED	
Address	W-279, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE, NAVI MUMBAI - 400 701, MAHARASHTRA, INDIA.	
E-mail	: <u>sales@adventchembio.com</u>	
WEBSITE	: <u>www.adventchembio.com</u>	
Company Phone Number	: <u>+91 77770 84837</u>	

2. HAZARDS IDENTIFICATION:

: Category 2
:
: Warning
: Causes serious eye irritation.
 Obtain special instructions before use. Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Do not handle until all safety precautions have been read and understood. Wear protective gloves/ protective clothing/ eye protection/ face protection. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. Keep container tightly closed. Ground/ bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
 IF exposed or concerned: Get medical advice/ attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 Store in a dry & well-ventilated place. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage.



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Disposal	:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification	:	This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION/ INFORMATION ON INGRADIENTS:			
Ingredient	CAS Number	NORMALITY	Hazardous
E.D.T.A N/10 Solution	NA	0.1 ± 0.005 N	No
4. FIRST AID MEASURES:			

General information	: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
Ingestion	 Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Move to fresh air. Call a physician or poison control center immediately. If breathing stops,
Inhalation	 provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms persist.
Skin contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Eye contact	Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Most important symptoms/effects, acute and delayed	: Irritating to eyes.
Indication of immediate medical attention and special treatment needed	: Symptoms may be delayed. Treat symptomatically.

5. FIRE FIGHTING MEASURES:

General information

Suitable (and unsuitable) extinguishing media

:

Suitable extinguishing media	Vater spray, foam, dry powder or carbon dioxide.	
Unsuitable extinguishing media	or this substance/mixture no limitations of extinguishing agents are given.	
Specific hazards arising from the chemical Special protective equipme	arbon oxides, Nitrogen oxides (NOx), Combustible. Development of hazardous co ases or vapors possible in the event of fire. precautions for firefighters	ombustion
Special firefighting	lse water spray to keep fire-exposed containers cool. Water may be ineffective	in fighting

Special mengining		Ose water spray to keep me-exposed containers cool. Water may be menective in lighting
procedures	:	the fire. Fight fire from a protected location. Move containers from fire area if you can do so
		without risk.



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Special protective equipment for fire-fighters	 Firefighters must use standard protective equipment including flame retardant coat, helme with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
6. ACCIDENTAL RELEASE MI	ASURES:
Personal precautions, protective equipment and emergency procedures	ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area) : Avoid breathing mists or vapors. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.
Methods and material for containment and cleaning up	Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk : Absorb spill with vermiculite or other inert material, then place in a container for chemica waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of large spill for later recovery and disposal.
Notification Procedures	Prevent entry into waterways, sewer, basements or confined areas. Inform authorities i large amounts are involved.
Environmental precautions	Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

Precautions for safe handling	Do not handle until all safety precautions have been read and understood. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Ground/bond
	: container and receiving equipment. Use explosion-proof
	electrical/ventilating/lighting/equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye protection/ face protection. Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Use only with adequate ventilation. Wash hands thoroughly after handling.
Conditions for safe storage,	Keep away from food, drink and animal feeding stuffs.
including any incompatibilities	: Keep container tightly closed in a dry, well-ventilated place.

8. EXPOSURE CONTROLS	PERSONAL PROTECTION:
Control parameters	
Occupational exposure	
limits	
Appropriate engineering	
controls	: No data available
Individual protection meas	sures, such as personal protective equipment
General information	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work



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Eye/face protection	. Wear safety glasses with side shields (or goggles).
Hand protection	Chemical resistant gloves.
Other	Wear suitable protective clothing.
Respiratory protection	In case of inadequate ventilation use suitable respirator. Chemical Respirator with organic vapor cartridge.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower Avoid contact with eyes, skin, and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance	:	Colourless crystals or white crystalline powder.
Odor	:	Odorless
Solubility	:	Soluble in mixture of dilute ammonia and water.
Formula	:	$C_{10}H_{16}N_2O_8$
Molecular Weight	:	292.25 g/mol
Specific Gravity	:	1.46 g/cm3 at 20°C
рН	:	2.5 at 10 g/l at 23 °C
% Volatiles by volume @ 21C (70F)	:	No data available
Boiling Point	:	No data available
Melting Point	:	250°C
Flash Point	:	No data available
Vapor Density (Air=1)	:	No data available
Vapor Pressure (mm Hg)	:	No data available
Evaporation Rate (BuAc=1)	:	No data available
10. STABILITY AND REACTIVITY:		

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Reactivity	In correspondingly fine distribution, when whirled up a dust explosion potent : generally be assumed.	tial may
Chemical stability	: Material is stable under ambient conditions	
Possibility of hazardous reactions	: Violent reactions possible with: Strong oxidizing agents, Strong bases	
Conditions to avoid	: No data available	
Incompatible materials	: Copper, Copper alloys, Nickel	

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Hazardous decomposition products	In the event of fire: see section 5			
11. TOXICOLOGICAL INFORM	ATION:			
Information on likely routes	f exposure			
Ingestion	: No data available			
Inhalation	: No data available			
Skin contact	: No skin irritation			
Eye contact	: Causes eye irritation			
Information on toxicological	ffects			
Acute toxicity (list all possib	routes of exposure)			
Oral Product	: LD 50 (Rat): 5,045 mg/kg			
Dermal Product	: LD 50 (Rabbit): 12,800 mg/kg			
Inhalation Product	No data available.			
Repeated dose toxicity Product	: No data available.			
Skin corrosion/irritation Product	: Prolonged or repeated skin contact may cause drying, cracking, or irritation			
Serious eye damage/eye irritation Product	: Irritating to eyes.			
Respiratory or skin sensitization Product	: Not a skin sensitizer.			
Carcinogenicity Product	: This substance has no evidence of carcinogenic properties			
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans	: No carcinogenic components identified.			
US. National Toxicology Program (NTP) Report on Carcinogens	: No carcinogenic components identified.			
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050 Germ cell mutagenicity	: No carcinogenic components identified.			
In vitro Product	: No data available.			
Reproductive toxicity Product	: No components toxic to reproduction .			
Specific target organ toxicity - single exposure Product	Not known.			



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Specific target organ toxicity - repeated exposure Product	None known.		
Aspiration hazard Product	: May be harmful if swallowed and enters airways .		
Other effects	: None known.		
12. ECOLOGICAL INFORMAT	7ION:		
Ecotoxicity Acute hazards to the aquatic	c environment		
Fish Product	: LC 50 Lepomis macrochirus (Bluegill sunfish) 96 h): > 41 mg/l .		
Aquatic invertebrates Product	: EC 50 (Water flea (Daphnia magna), 24 h): 625 mg/l .		
Chronic hazards to the aqua	tic environment		
Fish Product	: Flow-through test NOEC - Danio rerio (zebra fish) - >= 25,7 mg/l - 35 d		
Aquatic invertebrates Product	: semi-static test NOEC - Daphnia magna (Water flea) - 25 mg/l - 21 d		
Toxicity to Aquatic Plants Product:	No data available.		
Persistence and degradabilit	ÿ		
Biodegradation Product	: Aerobic - Exposure time 20 d, Result: 0 - 20 % - Not readily biodegradable.		
BOD/COD ratio Product	: <1%		
Bioaccumulative potential			
Bioconcentration factor (BCF) Product	: Lepomis macrochirus - 28 d at 21 °C - 80 μg/l		
Partition coefficient n- octanol / water (log Kow)	: No data available.		
Product Mobility in soil	: No data available.		
Other adverse effects	May be harmful to aquatic organisms due to the shift of the pH. Avoid release to th environment.		

Disposal instructions	:	Discharge, treatment, or disposal may be subject to national, state, or local laws. Disposal recommendations are based on uncontaminated material.
Contaminated packaging	:	Since emptied containers retain product residue, follow label warnings even after container is emptied.



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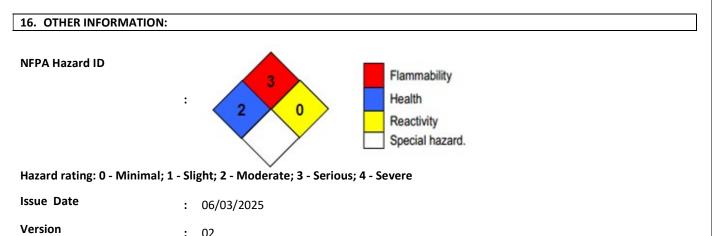
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14. TRANSPORT INFORMATION:								
	UN No.	UN proper shipping	Hazard	Packaging	Marine			
		name	Class(es)	group	Pollutant			
DOT	NA	E.D.T.A N/10 Solution	NA	Not dangerous goods	NA			
IMDG	NA	E.D.T.A N/10 Solution	NA	Not dangerous goods	NA			
ΙΑΤΑ	NA	E.D.T.A N/10 Solution	NA	Not dangerous goods	NA			

15. REGULATORY INFORMATION:

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Safety, health and environmental regulations/legislation specific for the substance or mixture No Data Available.



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