

CODEX 5323
MATERIAL SAFETY DATA SHEET

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- **Product identifier** :
 - Chemical Name : Hepta Sodium salt of Diethylene Triamine Penta Methylene Phosphonic Acid
 - Molecular formula : $C_9H_{21}N_3Na_7O_{15}P_5$
 - Chemical class : Organic liquid
 - Trade name : CODEX 5323
 - Synonyms : Sodium diethylenetriamine penta(methylene phosphonate); Diethylene triamine pentakis(phosphonic acid) hepta sodium salt
- **Name of manufacturer** :

CORPORATE HEAD OFFICE :

Excel Industries Limited
184-87, S.V. Road
Jogeshwari (West)
Mumbai - 400 102
Maharashtra, INDIA
Emergency Tel. : +91 22 6646 4200, 2678 8258
Fax : +91 22 2678 3508

MANUFACTURED AT :

Excel Industries Limited
Plot No. 112, MIDC Industrial Area
Dhatav, Roha
District - Raigad 402116
Maharashtra, INDIA
Emergency Tel. : +91 2194 264004, 264005
Fax : +91 2194 263703

- Product use : Industrial & institutional cleaner, Peroxide stabilizer for detergents

SECTION 2 : COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	CAS No.	%	EC / EINECS No.	Symbol	R / S Phrases
Hepta Sodium salt of Diethylene Triamine Penta Methylene Phosphonic Acid	22042-96-2	25% active acid	244-751-4	----	----
Sodium Chloride	7647-14-5	2%	231-598-3	----	----
Water	7732-18-5	66%	231-791-2	----	----

Note: See Section 16 for full text of R & S phrases mentioned above.

SECTION 3 : HAZARDS IDENTIFICATION

- Potential hazards : None
- Potential health effects : Mild irritant
- Relevant route of exposure :
 - Skin contact : Prolonged contact can cause mild temporary irritation
 - Eye Contact : Can cause mild temporary irritation. Permanent tissue damage is not expected
 - Inhalation : Mild irritation of respiratory system
 - Ingestion : May cause slight irritation, nausea



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- R-phrases : None
- S-phrases : None
- NFPA Code : None
- Environmental effects : None
- Hazard symbols : None

SECTION 4 : FIRST AID MEASURES

- Eyes : Immediately flush eyes with plenty of water for atleast 15 minutes. Eyelids should be held apart during the flushing. Seek medical attention immediately.
- Skin : Remove contaminated clothing. Wash affected area with large amounts of water & soap. Seek medical attention immediately. If the clothing is contaminated, it should be laundered.
- Inhalation : In case of exposure remove exposed person to fresh air. If breathing has ceased, give artificial respiration immediately. Seek medical attention..
- Ingestion : First rinse mouth. Give large amount of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention immediately.
- Note to Physician : Treat symptomatically

SECTION 5 : FIREFIGHTING MEASURES

- HAZCHEM code : ----
- Hazardous combustion products : Carbon oxides, Phosphorus oxides
- Conditions under which flammability could occur : Heat
- Extinguishing media : Water, Dry chemical powder, Dry sand , Foam, CO₂
- Unsuitable fire extinguishing media : None
- Sensitivity to explosion : No
- Fire fighting procedure : Prevent firefighting water from entering drainage, water sources.
- Special protective equipment for the fighters : Do not breathe fumes. Wear self-contained breathing apparatus and full protective clothing. Equipment should be thoroughly decontaminated after use.



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SECTION 6 : ACCIDENTAL RELEASE MEASURES

- Personal precautions : Do not inhale. Avoid contact with material. Use respiratory & personal protection recommended in Section 8.
- Environmental precautions : Prevent mixing with water bodies, sewers.
- Procedures for dealing with release or spill (Major/Minor) : Construct temporary dykes of sand, earth, dirt to prevent spreading of material. Absorb on sand, suitable absorbents or inert material. Carefully collect material in suitable closed containers for disposal. Use respiratory equipment & personal protective clothing. Dispose as per instructions mentioned in Section 13.
- Additional instructions : After clean up operations, decontaminate & launder all protective clothing and equipment before storing & reusing

SECTION 7 : HANDLING AND STORAGE

HANDLING :

- **Safe handling practices and equipment :** Good industrial practice in housekeeping and personal hygiene should be followed. Avoid contact with eyes, skin and clothing. Ensure good ventilation at workplace.
- **Instruction for fire & explosion protection:** No special precautions required

STORAGE :

- **Appropriate storage practices/ requirements:** Store in cool, dry, well-ventilated area away from heat and ignition sources. Keep containers closed. Isolate from incompatible material & conditions. Protect against physical damage. Check regularly for leaks.
- **Material of construction of containers:** HMHDPE drums

SECTION 8 : EXPOSURE CONTROL / PERSONAL PROTECTION

- **Occupational exposure limit values / Biological limit values:** No data available
- **Applicable control measures, including engineering controls:** Good industrial practice in housekeeping should be followed. Ensure adequate ventilation of workplace & storage areas.
- **Industrial Hygiene Controls:** Good personal hygiene practices should be followed. Avoid contact with eyes, skin and clothing. Wash hands before breaks and after work. Do not eat, drink, smoke in the workplace. Use personal protective equipment.
- **Personal protective equipment for each exposure route (type & MOC):**
 - Eyes : Safety goggles, Face shield.
 - Skin : PVC / Rubber gloves.
 - Clothing : Body apron / Protective suit
 - Foot : Safety shoes / Gumboots
 - Respiratory protection : If risk of overexposure exists wear respirator with appropriate filter.



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SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : Liquid
- Appearance : Clear brown (Amber) liquid
- Odour : Faint
- Boiling point : > 100°C
- Melting point : < -10°C
- Specific gravity : 1.29 ± 0.01 @ 25°C
- pH : 6.5 - 7.5 (1% solution)
- Solubility in water : Miscible in water
- Flash point (with method) : Not applicable
- Upper explosive limit in air : Not applicable
- Lower explosive limit in air : Not applicable
- Auto ignition temperature : Not applicable

SECTION 10 : STABILITY AND REACTIVITY

- Chemical stability : Generally stable under normal conditions of handling and storage.
- Conditions to avoid : Heat, Fire
- Incompatibility with other materials : Oxidising substances, alkalis, strong acids
- Hazardous decomposition products : Oxides of carbon, Oxides of phosphorus
- Hazardous polymerization : None
- Effect of weather (Humidity/ oxygen/ CO₂) : None

SECTION 11 : TOXICOLOGICAL INFORMATION

Toxicology data:

- Skin : Dermal LD50 (Rabbit) - 5000 mg/kg
- Ingestion : Oral LD50 (Rat) - 5000 mg/kg
- Inhalation : No data available
- Irritancy : Mild irritation of skin & eyes
- Sensitization : No data available
- Carcinogenicity : No data available
- Reproductive toxicity : None
- Teratogenicity : None
- Mutagenicity : None
- Name of toxicologically synergistic products : No data available

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SECTION 12 : ECOLOGICAL INFORMATION

- Ecotoxicity:
 1. Aquatic toxicity :
EC50 / Daphnia / 48H : > 200 mg/l
 2. Toxicity to algae :
EC50 / Selenastrum capricornutum / 96H : > 1 mg/l
 3. Toxicity to fish :
LC50 / Rainbow trout / 96H : > 180 mg/l LC50 / Bluegill sunfish / 96H : > 700 mg/l
- Mobility : No data available
- Persistence and degradability in soil/
water : Not readily biodegradable
T_{1/2} : 789 days
- Bioaccumulation potential : No data available
- Other adverse effects (ODP, GWP, etc). : No data available

SECTION 13 : DISPOSAL CONSIDERATION

- **Waste disposal information of product & contaminated packaging:** Spill and waste disposal procedures approved by state and local authorities must be observed. Labels should not be removed from containers until they have been cleaned and decontaminated. Decontaminate the container taking suitable precaution considering hazard before reuse or recycle and dispose off as per local rules. Do not use empty containers for storing food.

SECTION 14 : TRANSPORT INFORMATION

Regulatory information	UN No.	Proper shipping name	UN Class & Subs. Haz class	Packaging group	Label	Additional information
IMDG	Not regulated for transport	CODEX 5323 (Hepta Sodium salt of Diethylene Triamine Penta Methylene Phosphonic Acid)	----	----	----	
ADR/ RID	Not regulated for transport	CODEX 5323 (Hepta Sodium salt of Diethylene Triamine Penta Methylene Phosphonic Acid)	----	----	----	
US-DOT	Not regulated for transport	CODEX 5323 (Hepta Sodium salt of Diethylene Triamine Penta Methylene Phosphonic Acid)	----	----	----	
ICAO/ IATA	Not regulated for transport	CODEX 5323 (Hepta Sodium salt of Diethylene Triamine Penta Methylene Phosphonic Acid)	----	----	----	

SECTION 15 : REGULATORY INFORMATION

- National laws/ Regional laws:- No information available



EXCEL INDUSTRIES LIMITED

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SECTION 16 : OTHER INFORMATION

Full text of R & S phrases given below:-

No R&S phrases

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