



CODEX 3315
MATERIAL SAFETY DATA SHEET

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

- **Product identifier** :
 - Chemical Name : Penta sodium salt of ethylene diamine tetra methylene phosphonic acid.
 - Molecular formula : $C_6H_{15}O_{12}N_2P_4Na_5$
 - Chemical class : Organic liquid
 - Trade name : CODEX 3315
 - Synonyms : ---
- **Name of manufacturer** :

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- **Product use** : Boiler water treatment, Reverse osmosis, Desalination, $CaSO_4$ inhibition

SECTION 2 : COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name	CAS No.	%	EC / EINECS No.	Symbol	R / S Phrases
Penta sodium salt of ethylene diamine tetra methylene phosphonic acid.	7651-99-2	25% active acid	231-615-4	None	None

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

SECTION 3 : HAZARDS IDENTIFICATION

- Potential hazards : Mild irritant.
- Potential health effects : Mild irritant.
- Relevant route of exposure :
 - Skin contact : Causes slight irritation
 - Eye Contact : Causes slight irritation
 - Inhalation : Very unlikely
 - Ingestion : Causes slight irritation to mouth and mucous membrane



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- R-phrases : None
- S-phrases : None
- NFPA Code : No data available
- Environmental effects : No data available
- Hazard symbols : None

SECTION 4 : FIRST AID MEASURES

- Eyes : Wash out eyes with water for at least 15 minutes. Seek medical attention if irritation is observed.
- Skin : Remove contaminated clothing. Wash contaminated skin with water. Seek medical attention if irritation is observed.
- Inhalation : Inhalation hazard is very unlikely. However in case of exposure remove casualty to fresh air area. Seek medical attention if required.
- Ingestion : If victim is conscious rinse out mouth and give water to drink. Do not induce vomiting. Seek medical attention.
- Medical conditions likely to be aggravated by exposure : None known
- Note to Physician : Specific antidote is not known. Provide general supportive measures and treat symptomatically.

SECTION 5 : FIREFIGHTING MEASURES

- HAZCHEM code : ----
- Hazardous combustion products : Phosphine
- Conditions under which flammability could occur : Heat
- Extinguishing media : Water, Carbon dioxide
- Unsuitable fire extinguishing media : -----
- Sensitivity to explosion : Not applicable
- Fire fighting procedure : To avoid buildup of pressure, cool drums involved in fire with water. Fight fire from safe distance. Use personal protective equipment.
- Special protective equipment for the fighters : Wear self-contained breathing apparatus and protective clothing. Equipment should be thoroughly decontaminated after use.



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SECTION 6 : ACCIDENTAL RELEASE MEASURES

- Personal precautions : Avoid contact of material with skin, eyes, clothing. Use personal protection recommended in Section 8.
- Environmental precautions : Prevent mixing with water bodies.
- Procedures for dealing with release or spill (Major/Minor) : Contain the leakage on earth, sand, suitable absorbent. Carefully collect material in plastic containers for disposal. Wash contaminated area with water. Use 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 smoking. Avoid ignition sources.

STORAGE :

- **Appropriate storage practices/ requirements:** Store in sealed containers in a cool, dry and well ventilated place. Avoid ignition sources. Keep isolated from incompatible materials.
- **Technical measures:** ----
- **Material of construction of containers:** HMHDPE containers

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 and personal hygiene should be followed. Avoid contact with eyes, skin and clothing. Ensure adequate ventilation of workplace.
- **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.
 - Skin : PVC or rubber gloves.
 - Clothing : Chemical resistant apron
 - Foot : Safety shoes / Gumboots
 - Respiratory protection : ----



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SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

- Physical state : Liquid
- Appearance : Clear colourless to pale yellow liquid
- Odour : ---
- Vapor pressure & reference temperature : No data available
- Boiling point : No data available
- Freezing / Melting point : -14° C
- Specific gravity : 1.31 ± 0.01 at 25° C
- Odor threshold : No data available
- pH : 6-8 (1% solution)
- Solubility in water : Miscible in water
- Flash point (with method) : Non flammable
- Upper explosive limit in air : Not applicable
- Lower explosive limit in air : Not applicable
- Auto ignition temperature : No data available

SECTION 10 : STABILITY AND REACTIVITY

- Chemical stability : Generally stable under normal conditions of handling and storage.
- Conditions to avoid : Heat
- Incompatibility with other materials : Oxidizing substance
- Hazardous decomposition products : Phosphine
- Hazardous polymerization : No data available
- Effect of weather (Humidity/ oxygen/ CO₂) : No data available

SECTION 11 : TOXICOLOGICAL INFORMATION

Toxicology data:

- Skin : No data available
- Ingestion : No data available
- Inhalation : No data available
- Irritancy : No data available
- Sensitization : No data available
- Carcinogenicity : No data available
- Reproductive toxicity : No data available
- Teratogenicity : No data available
- Mutagenicity : No data available
- Name of toxicologically synergistic products : No data available



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SECTION 12 : ECOLOGICAL INFORMATION

Ecotoxicity : No data available

- Mobility : No data available
- Persistence and degradability in soil/
water : No data available
- 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 the hazard.

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	----	----	----	
ADR/ RID	----	Not regulated for transport	----	----	----	
US-DOT	----	Not regulated for transport	----	----	----	
ICAO/ IATA	----	Not regulated for transport	----	----	----	

SECTION 15 : REGULATORY INFORMATION

- National laws/ Regional laws:-
 - Europe -
 - EINECS No. 231-615-4



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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