MATERIAL SAFETY DATA SHEET (MSDS)

1. PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name:

- Cetyltrimethylammonium Chloride Powder (CTAC Powder)
- Synonyms: Cetrimonium chloride, Hexadecyltrimethylammonium chloride

Manufacturer/Supplier:

Swadesh (India) Chemical Pvt. Ltd.

Address:

Survey No: 512, Plot No. 7, Shri Hari Industrial Park, Kadadra Village, Near ZAK GIDC, Dehgam, Gandhinagar, Gujarat, India – 382330

Contact:

Email: business@swadeshindia.inWebsite: www.swadeshindia.in

Recommended Use:

• Surfactant, emulsifier, hair conditioner, biocide

2. COMPOSITION/INGREDIENT INFORMATION

Component	CAS No.	Concentration (%)
Cetyltrimethylammonium Chloride	112-02-7	≥ 95%

Additional Notes:

• Impurities: May contain trace moisture (<1%) and residual solvents.

3. HAZARDS IDENTIFICATION

GHS Classification:

- Acute Toxicity (Oral, Category 4)
- Skin Irritation (Category 2)
- Eye Damage (Category 1)
- Hazardous to Aquatic Life (Chronic, Category 2)

Hazard Statements (H-Codes):

- H302 (Harmful if swallowed)
- H315 (Causes skin irritation)
- H318 (Causes serious eye damage)
- H411 (Toxic to aquatic life with long-lasting effects)

Precautionary Statements (P-Codes):

- P264 (Wash hands thoroughly after handling)
- P280 (Wear protective gloves/eye protection/face protection)
- P301+P310 (IF SWALLOWED: Immediately call a poison center/doctor)
- P305+P351+P338 (IF IN EYES: Rinse cautiously with water for several minutes)

4. FIRST AID MEASURES

- Inhalation: Move to fresh air; seek medical attention if breathing difficulty occurs.
- **Skin Contact:** Wash with soap and water; remove contaminated clothing.
- Eye Contact: Rinse immediately with water for 15 mins; consult an ophthalmologist if irritation persists.
- Ingestion: Rinse mouth, drink water; **DO NOT induce vomiting.** Seek medical help if symptoms appear.

5. FIRE FIGHTING MEASURES

- Extinguishing Media: CO₂, dry chemical, or alcohol-resistant foam.
- Hazardous Combustion Products: CO, CO₂, nitrogen oxides, hydrogen chloride gas.
- Protective Equipment for Firefighters: Powder may form explosive dust-air mixtures.

6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

- Spill Response:
 - o **Personal Precautions**: Wear P95 dust mask, goggles, and gloves.
 - Environmental Precautions: Prevent powder dispersal into air/water.
 - Cleanup Methods: Carefully sweep up and place in sealed container.

7. HANDLING AND STORAGE

- Handling:
 - Use in dust-controlled environments.
 - Avoid creating airborne dust.
- Storage:
 - Store in airtight containers in a cool, dry place.
 - Keep away from strong oxidizers.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

- Engineering Controls: Local exhaust ventilation required for powder handling.
- PPE:
 - Respiratory: NIOSH-approved N95/P95 mask
 - Gloves: Nitrile or neoprene
 - Eye Protection: Tight-fitting gogglesBody Protection: Lab coat with cuffs

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value	
Appearance	White crystalline powder	
Odor	Slight amine-like	
Melting Point	~246-250°C	
Solubility in Water	Soluble	
pH (1% solution)	6.0 - 8.0	

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal conditions

Incompatible Materials:

- Strong oxidizers
- Strong acids/bases

Hazardous Decomposition Products:

Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

• LD₅₀ (oral, rat) ~400 mg/kg.

Skin Irritation:

Prolonged contact may cause dermatitis.

Carcinogenicity:

• Causes severe damage (powder form is particularly hazardous).

12. ECOLOGICAL INFORMATION

Ecotoxicity:

- LC₅₀ (fish) <1 mg/L.
- Persistence/Bioaccumulation: Not readily biodegradable.

13. DISPOSAL CONSIDERATIONS

Waste Disposal:

- Incinerate in an approved facility with a scrubber for HCl removal.
- Never dispose of it in waterways.



14. TRANSPORT INFORMATION

DOT/IMO/IATA:

• Not classified as hazardous for transport when packaged properly.

15. REGULATORY INFORMATION

India:

Compliant with CPCB regulations

International:

- REACH registered
- OSHA compliant

16. ADDITIONAL INFORMATION

Revision Date: 20/04/24

Disclaimer: This MSDS is provided for informational purposes only. Users should make their own determination of suitability for any particular purpose.