



MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Cyclobenzaprine Hydrochloride

Chemical Name: 1-Propanamine, 3-(5H-dibenzo[a, d]cyclohepten-5-ylidene)-N, N-dimethyl-, hydrochloride

SECTION 2 – HAZARDOUS IDENTIFICATION

Hazard statement: Toxic if swallowed.

Potential Acute Health Effects: Hazardous in case of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (irritant).

Potential Chronic Health Effects: CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available

Repeated or prolonged exposure is not known to aggravate medical condition.

SECTION 3 – COMPOSITION AND INGREDIENTS

Name	CAS#	% by weight
Cyclobenzaprine Hydrochloride	3202-23-9	100

SECTION 4 – FIRST AID MEASURES

Inhalation: May cause irritation. Remove to fresh air.

Eye: Causes irritation. Avoid contact. Flush with copious quantities of water for at least 15 minutes.

Skin: May cause irritation. Flush with copious quantities of water.

Ingestion: May cause irritation and toxicity. Flush out mouth with water. This material is slowly but almost completely absorbed from the gastrointestinal tract. Effects begin in 1 hour and may last between 12 and 24 hours.

General First Aid Procedures: Remove from exposure. Remove contaminated clothing. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention. If person is not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.

Note to Physicians: Overdose Treatment: Treatment of cyclobenzaprine HCl Overdose should be symptomatic and supportive and may include the following:

1. Empty the stomach and decrease absorption via gastric lavage or activated charcoal.
2. For severe or life-threatening cholinergic effects use physostigmine salicylate. Repeat dose as required if symptoms persist. Physostigmine is only recommended for severe cases due to its toxicity.
3. For cardiac arrhythmia administer neostigmine, pyridostigmine, or propranolol.



4. For cardiac failure consider a short acting digitalis preparation. Close monitoring of cardiac function for at least five days is recommended.
5. For convulsions administer an appropriate anticonvulsant. Benzodiazepines are most often used; however this is recommended only in a medical setting with respiration and resuscitation support available.
6. Supportive measures include maintaining open airway, maintaining adequate fluid intake, regulating body temperature, and treating circulatory shock, convulsions, and metabolic acidosis as necessary.
7. Dialysis is probably of no value in removing Cyclobenzaprine hydrochloride from the body.

SECTION 5 – FIRE/EXPLOSION DATA AND MEASURES

Extinguisher Media: Water spray, dry chemical, carbon dioxide or foam as appropriate for surrounding fire and materials.

Firefighting Procedures: As with all fires, evacuate personnel to a safe area. Firefighters should use self-contained breathing equipment and protective clothing.

Fire and Explosion Hazards: This materials is assumed to be combustible. As with all dry powders it is ill advisable to ground mechanical equipment in contact with dry material to dissipate the potential buildup of static electricity.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spill Response: Wear approved respiratory protection, chemically compatible gloves and protective clothing. Wipe up spillage or collect spillage using a high efficiency vacuum cleaner. Avoid breathing dust. Place spillage in appropriately labeled container for disposal. Wash spill site.

SECTION 7 – HANDLING AND STORAGE

Handling: As a general rule, when handling USP Reference Standards avoid all contact and inhalation of dust, mists, and/or vapors associated with the material. Wash thoroughly after handling.

Storage: Store in right container as defined in the USP-NF. This material should be handled and stored per label instructions to ensure product integrity.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Engineering controls such as exhaust ventilation are recommended.

Respiratory Protection: Use a NIOSH approved respirator, if it is determined to be necessary by an industrial hygiene survey involving air monitoring. In the event that a respirator is not required, an approved dust mask should be use.

Gloves: Chemically compatible

Eye Protection: Safety glasses or goggles.

Protective Clothing: Protect exposed skin

Exposure Limits: Industry: TWA: 0.08 mg/m³



SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White to off-white crystalline powder.

Odor: Odorless

pH: -N/A-

Melting Range: 216 – 218°C

Boiling Point: -N/A-

Flash Point: -N/A-

Auto ignition Temperature: -N/A-

Evaporation Rate: -N/A-

Upper Flammability Limit: -N/A-

Lower Flammability Limit: -N/A-

Vapor Pressure: -N/A-

Vapor Density: -N/A-

Specific Gravity: -N/A-

Solubility in Water: Freely soluble

Fat Solubility: -N/A-

Other Solubility: Freely soluble in alcohol and in methanol; sparingly soluble in isopropanol; slightly soluble in chloroform and in methylene chloride; insoluble in hydrocarbons.

Partition Coefficient: n-octanol/water: -N/A-

Percent Volatile: -N/A-

Reactivity in Water: -N/A-

Explosive Properties: -N/A-

Oxidizing Properties: -N/A-

Formula: C₂₀H₂₁N.HCl

SECTION 10 – STABILITY AND REACTIVITY

Conditions to Avoid: -N/A-

Incompatibilities: -N/A-

Decomposition Products: When heated to decomposition material emits toxic fumes of NO_x and HCl. Emits toxic fumes under fire conditions.

Hazardous Polymerization: No

SECTION 11 – TOXICOLOGICAL INFORMATION

Oral Rat: LD50: 425 mg/kg

Oral Mouse: LD50: 250 mg/kg

Other Toxicity Data: -N/A-

Irritancy Data: Animal (species not specified)/eye: severe; Animal (species not specified)/skin: non-irritant.

Corrosivity: -N/A-

Sensitization Data: -N/A-

NTP: No **IARC:** No **OSHA:** No **Listed**

Other Carcinogenicity Data: Cyclobenzaprine HCl did not show evidence of carcinogenicity in an



81-week study in mice or in a 105-week study in rats.

Mutagenicity Data: Male rats receiving up to 20 times the human dose of Cyclobenzaprine HCl showed no evidence of mutagenicity.

Reproductive and Developmental Effects: Studies in rats, mice, and rabbits have now shown that Cyclobenzaprine HCl has adverse effects on the fetus when given doses up to 20 times the human dose. There was no evidence of impaired fertility in male or female rats receiving up to 10 times the human dose of Cyclobenzaprine HCl.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: Very toxic to freshwater and marine organisms.

SECTION 13 – TRANSPORTATION INFORMATION

Shipping Name: -N/A-

Class: -N/A-

UN Number: -N/A-

Packing Group: -N/A-

Additional Transport Information: -N/A-