

Safety Data Sheet

## Clonidine HCL Injection

### Section 1: Chemical Product and Company Identification

**Product Name:** Clonidine Hydrochloride Injection

**Chemical Name(s):** 2-[(2, 6-dichlorophenyl) imino] imidazolidinemonohydrochloride;  
Benzeneamine, 2,6-dichloro-N-2-imidazolidinylidene monohydrochloride

**Synonym:** Not available

**CAS Number:** 4205-91-8

**RTECS #:** NJ2490000

**Trade Name:** Clonidine Hydrochloride

**Chemical Formula:**  $C_9H_9Cl_2N_3 \cdot HCL$



Health	3
Fire	1
Reactivity	0
Personal Protection	E

**Contact Information:**

X-GEN Pharmaceuticals, Inc.

PO Box 445, Big Flats, NY 14814

**Technical Assistance:** 607-562-2700

**Online Assistance:** [www.x-gen.us](http://www.x-gen.us)

**Emergency phone number:**

National Poison Control

1-800-222-1222

\*\*For information regarding recommended uses and restrictions on usage refer to the product package insert.

### Section 2: Hazard Identification

**Hazard pictograms (GHS-US):**



**Potential Acute Health Effects:** Very hazardous in case of skin contact (permeator), ingested, inhalation or injection. Hazardous in case of eye contact (irritant). Slightly hazardous in case of skin contact (irritant). Severe over-exposure can result in death.

**Potential Chronic Health Effects:** Very hazardous in case of skin contact (permeator), ingested, inhalation or injection. Hazardous in case of eye contact (irritant). Slightly hazardous in case of skin contact (irritant).

**Carcinogenic Effects:** Not available

**Mutagenic Effects:** Not available

**Teratogenic Effects:** Not available

**Developmental Toxicity:** The substance is toxic to lungs and nervous system. Repeated or prolonged exposure to the substance can produce target organ damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or more human organs. Target organs are: Central Nervous System, Cardiovascular system, skin and lungs.

**Adverse effects:** Ingestion or injection may include nausea, blood pressure effects, drowsiness, confusion and respiratory depression. May cause sensitization and allergic reaction to material if inhaled, ingested, injected or in contact with skin.

### Section 3: Composition and Information on Ingredients

#### Principle Components:

<u>Name</u>	<u>CAS #</u>	<u>% by Weight</u>
Clonidine HCL, USP	4205-91-8	0.01 – 0.05%
Sodium Chloride, NF	7647-14-5	0.9%
Sodium Hydroxide, NF	1310-73-2	As needed to adjust to pH 5-7
Hydrochloric Acid=, NF	7647-01-0	As needed to adjust to pH 5-7
Water for Injection, USP	7732-18-5	> 99%

### Section 4: First Aid Measures

**General:** Remove from exposure. Remove contaminated clothing. For treatment advice, seek guidance from an occupational health physician or other licensed health-care provider familiar with workplace chemical exposure. If person is not breathing give artificial respiration. If breathing is difficult give oxygen. Persons developing serious hypersensitivity (anaphylactic) reactions must receive immediate medical attention. Obtain medical attention

**Inhalation:** No specific treatment is necessary. This product is not likely to be hazardous by inhalation. Seek medical attention immediately.

**Skin contact:** In case of contact, immediately wash skin with plenty of water. Gently and thoroughly wash the contaminated skin with cold running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cover skin with an emollient. Remove contaminated clothing and shoes. Wash clothes and thoroughly clean shoes before reuse. Seek medical attention immediately.

**Eye contact:** Check for and remove any contacts lenses. Immediately flush eyes with plenty of water for at least 15 minutes, keep eyelids open. May use cold water. DO NOT use eye ointment. Seek medical attention immediately.

**Ingestion:** DO NOT induce vomiting. Examine mouth and lips to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested. However, the absence of such sign is not conclusive. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call physician immediately. Loosen tight clothing such as tie, collar and/or belt. Seek medical attention immediately.

**Notes to physician:** Seek product package insert for complete information.

**Overdose Treatment:** Treat overdose symptomatically.

## Section 5: Fire Fighting Measures

**Flammability of the product:** Not established.

**Combustion Products:** These products are carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO, NO<sub>2</sub>...) and halogenated compounds.

**Unusual Fire and Explosion Hazards:** This product may decompose and produce irritating fumes and toxic gases. Thermal decomposition may result in the emission of hazardous combustion products such as: carbon dioxide, carbon monoxide, nitrogen oxides and hydrogen chloride.

### **Extinguishing Media and Instruction:**

**Small fire:** Use DRY chemical powder. **Large fire:** Use water spray, fog or foam. DO NOT use water jet.

**Protective equipment & precautions for firefighters:** As with all fires, evacuate personnel to a safe area. Firefighters should wear self-contained breathing apparatus and protective clothing.

**Special remarks on fire hazard:** Not available

**Special remarks on explosion hazard:** Not available

## Section 6: Accidental Release Measures

### **Release to land:**

**Small spill:** Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local, state, and federal regulations.

**Large spill:** Use a shovel to put the material into a convenient waste disposal container. Sweep up or vacuum. Finish cleaning by spreading water on the contaminated surface and clean surface thoroughly to remove residual contamination. Collect in suitable container for disposal. For proper waste disposal, see section 13 of the SDS.

**Release to air:** Not available

**Release to water:** Refer to local water authority; drain disposal is not recommended.

**Protective equipment:** Keep unnecessary personnel away. Wear approved respiratory protection, chemical safety goggles, chemically compatible gloves and protective clothing such as protective coveralls and shoe covers for spills.

## Section 7: Handling and Storage

**Handling:** As a general rule, when handling Clonidine HCL Injection, avoid all contact and inhalation of mists and/or vapors associated with the material.

Keep locked up. Keep away from heat, sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. DO NOT ingest. Avoid contact with skin. Wear suitable protective clothing in case of insufficient ventilation. If you feel unwell, seek medical attention and show label when possible. Use only in accordance with directions.

**Storage:** Keep container dry and tightly closed. Keep container in a cool, dry, well ventilated area. Controlled room temperature should be 20 - 25°C (68 - 77°F). Refer to label instructions to ensure product integrity.

**Incompatibilities:** Acids and strong oxidizers.

## Section 8: Exposure Controls / Personal Protection

**Engineering controls:** No special ventilation requirements. May use process enclosure, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generates fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal protection:** Splash goggles. Lab coat. Nitrile or latex gloves. Respirator. Be sure to use an approved/ certified respirator or equivalent. **In case of large spill:** Splash goggles. Full suit. Respirator. Boots. Nitrile or latex gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Respiratory protection:** Under normal use, respirators are not required. Use a disposable mask (N95) if needed. Personnel wearing respirators should be fit tested and approved for respirator use, under OSHA Respiratory Protection Standard 29 CFR 1910.134.

**Exposure limit:** Not available

## Section 9: Physical and Chemical Properties

**Physical appearance:** Liquid

**Color:** Clear, colorless

**Molecular Weight:** 266.56 g/mole

**Taste:** Not available

**Odor:** Odorless

**Odor Threshold:** Not available

**pH:** 5-7

**Melting Point:** Not available

**Freezing Point:** Not available

**Boiling Point:** ~ to water

**Flash Point:** Not available

**Evaporation rate:** Not available

**Flammability:** Not available  
**Upper Flammable Limit:** Not available  
**Lower Flammable Limit:** Not available  
**Vapor Pressure:** Not available  
**Vapor Density:** Not available  
**Relative density:** Not available  
**Partition Coefficient:** Not available

**Auto-Ignition Temperature:** Not available  
**Decomposition Temperature:** Not available  
**Viscosity:** Not available  
**Dispersion Properties:** Not available  
**Solubility:** Soluble in cold water, Methanol.  
Insoluble in diethyl ether.

## Section 10: Stability and Reactivity

**Reactivity:** Not available

**Chemical stability:** The product is stable

**Conditions to avoid:** Avoid temperatures exceeding 30°C (86°F).

**Incompatible materials:** Reactive with acids and strong oxidizers.

**Possibility of hazardous reaction:** Not available

**Hazardous decomposition products:** May react to strong oxidizing agents (e.g. peroxides, Permanganates, nitric acid, etc.) Strong acids, some metals, and substances that are incompatible with water.

**Corrosivity:** Non-corrosive in presence of glass.

**Polymerization:** May react with strong oxidizing agents (e.g. peroxides, permanganates, nitric acid, etc.).

## Section 11: Toxicological Information

**Routes of exposure:** Dermal contact, eye contact, inhalation and ingestion.

**Symptoms:**

**Short term:** Slightly hazardous in case of skin contact (irritant). **Long term:** Very hazardous in case of skin contact (permeator), ingestion or inhalation. This substance is toxic to lungs and the nervous system.

**Reproductive toxicity:** Not available

**FDA Pregnancy Category:** C

**Toxicity to animals:**

**Oral Rat:** LD50: 126 mg/kg

**Oral Dog:** LD50: 30 mg/kg

**IV Mouse:** LD50: 17.6 mg/kg

**Oral Mouse:** LD50: 135 mg/kg

**IV Rat:** LD50: 29 mg/kg

**Inhalation Rat:** LD50: 19.7 mg/m<sup>3</sup>

**Measures of toxicity:** Not available

**Additional reproductive health and toxicity data is available from the National Institute for Occupational Safety and Health (NIOSH) and/or Registry of Toxic Effects of Chemical Substance (RTECS).**

## Section 12: Ecological Information

**Ecotoxicity:** Not available

**Bioaccumulation potential:** Not available

**Products of biodegradation:** Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the products of biodegradation:** The products of degradation are more toxic.

## Section 13: Disposal Information

**Waste classification:** Hazardous

**Waste from residues/unused products:** Dispose of waste in accordance with all applicable federal, state and local laws.

**Waste Disposal:** Dispose of waste in accordance with all applicable federal, state and local laws.

## Section 14: Transport Information

**DOT Classification:** CLASS 6.1: Poisonous Material

**UN Number:** UN2811

**UN Shipping name:** Toxic, organic, n.o.s. (Clonidine Hydrochloride)

**Transport hazard class:** Not available

**Packing Group:** Not available

**Environmental hazard:** Not available

**Transport in bulk:** Not available

**Special precautions needed with transport:** Not available

**ICAO / IATA:**

<b>IATA Proper shipping name:</b>	NA
<b>IATA UN NUMBER</b>	1113
<b>IATA Primary Hazard</b>	3
<b>IATA Packing group:</b>	II
<b>ICAO ERG Code:</b>	NA

## Section 15: Regulatory Information

**Federal and State Regulations:** TSCA 8(b) inventory: No products were found.

**Other Regulations:** OSHA: Hazardous by definition of Hazardous Communication Standards (29 CFR 1910.1200).

**Other Classifications:**

**WHMIS (Canada):** CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC). CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

**DSCL (EEC):** R25 – Toxic if swallowed. R36 – Irritating eyes.

**HMIS (U.S.A.):**

**Health Hazard:** 3

**Fire Hazard:** 1

**Reactivity:** 0

**Personal Protection:** E

**National Fire Protection Association (U.S.A.):**

**Health:** 3

**Flammability:** 1

**Reactivity:** 0

**Protective Equipment:** Gloves, lab coat, safety glasses and respirator. Be sure to use an approved/certified respirator or equivalent.

## Section 16: Other Information

**References:** Not available

**Created:** 2/13/2015

**Last Updated:** 3/27/2015

**Prepared & Approved by:** X-GEN Pharmaceuticals, Inc., Safety Committee

*The above information is believed to be accurate and represents the best information currently available to us. The use of this product should be through or under the direction of a physician. This SDS does not address therapeutic use of this material. X-GEN Pharmaceuticals, Inc. makes no warranties, express or implied with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information. In no event should X-GEN Pharmaceuticals be liable for any claim, loss, or damage of any third party, even if X-GEN Pharmaceuticals has been advised of the possibility of such damages to occur.*