Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

<table>
<thead>
<tr>
<th>NFPA</th>
<th>HMIS</th>
<th>Personal Protective Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>See Section 15.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Common Name/Trade Name</th>
<th>Clonidine HCl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number(s)</td>
<td>YY853, CL118</td>
</tr>
<tr>
<td>CAS#</td>
<td>4205-91-8</td>
</tr>
<tr>
<td>RTECS</td>
<td>NJ2490000</td>
</tr>
<tr>
<td>TSCA</td>
<td>TSCA 8(b) inventory: No products were found.</td>
</tr>
</tbody>
</table>

Manufacturer
SPECTRUM CHEMICAL MFG. CORP.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

Commercial Name(s) Not available.

Synonym
2,6-Dichloro-N-2-imidazolidinylidenebenzenamine hydrochloride
1H-Imidazol-2-amine, N-(2,6-dichlorophenyl)-4,5-dihydro- monohydrochloride (9CI)
2-((2,6-Dichlorophenyl)amino)-2-imidazoline hydrochloride
2-((2,6-Dichlorophenyl)imino)imidazolidine monohydrochloride
2-(2,6-Dichlorophenylamino)-2-imidazoline hydrochloride
Atensina
Benzenamine, 2,6-dichloro-N-2-imidazolidinylidene-, hydrochloride
Capresin
Catapres
Catapresan
Chlophazolin
Clofelin
Clonidine monohydrochloride
Clopheilnum
Clophilin
Dixarit
Haemiton
Hemiton
Isoglaucon
Katapresan
Klophelin
Normopresan

Chemical Name Not available.

Chemical Family Not available.

Chemical Formula C9H9Cl2N3.HCl

Supplier SPECTRUM CHEMICAL MFG. CORP.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300

CALL (310) 516-8000

Continued on Next Page
Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Clonidine HCl</td>
<td>4205-91-8</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Toxicological Data on Ingredients

- **ORAL (LD₅₀):** Acute: 126 mg/kg [Rat]. 80 mg/kg [Rabbit]. 135 mg/kg [Mouse].
- **DUST (LC₅₀):** Acute: 19.7 mg/m³ 4 hours [Rat].

Section 3. Hazards Identification

<table>
<thead>
<tr>
<th>Potential Acute Health Effects</th>
<th>Very hazardous in case of inhalation. Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant). Severe over-exposure can result in death.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential Chronic Health Effects</td>
<td>Slightly hazardous in case of skin contact (sensitizer). CARCINOGENIC EFFECTS: Not available.  MUTAGENIC EFFECTS: Not available.  TERATOGENIC EFFECTS: Not available.  DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to the nervous system, cardiovascular system, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.</td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

**Eye Contact**  
Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

**Skin Contact**  
After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.

**Serious Skin Contact**  
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

**Inhalation**  
Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

**Serious Inhalation**  
Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

**Ingestion**  
Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

**Serious Ingestion**  
Not available.

Section 5. Fire and Explosion Data

**Flammability of the Product**  
May be combustible at high temperature.

**Auto-Ignition Temperature**  
Not available.

**Flash Points**  
Not available.

**Flammable Limits**  
Not available.

**Products of Combustion**  
These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂…), halogenated compounds.

**Fire Hazards in Presence of Various Substances**  
Not available.

Continued on Next Page
### Section 6. Accidental Release Measures

**Small Spill**
Use appropriate tools to put the spilled solid in a convenient waste disposal container.

**Large Spill**
Poisonous solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.

### Section 7. Handling and Storage

**Precautions**
Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label.

**Storage**
Keep container tightly closed. Keep container in a cool, well-ventilated area. Sensitive to light. Store in light-resistant containers.

### Section 8. Exposure Controls/Personal Protection

**Engineering Controls**
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

**Personal Protection**
Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

**Personal Protection in Case of a Large Spill**
Splash goggles. Full suit. Dust respirator. Boots. 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.

**Exposure Limits**
Not available.

### Section 9. Physical and Chemical Properties

**Physical state and appearance**
Solid. (Crystalline powder.)

**Odor**
Not available.

**Molecular Weight**
266.56 g/mole

**Taste**
Not available.

**pH (1% soln/water)**
Not available.

**Color**
White. Off-white.

**Boiling Point**
Decomposes.

**Melting Point**
130°C (266°F)

**Critical Temperature**
Not available.

**Specific Gravity**
Not available.

**Vapor Pressure**
Not applicable.

**Vapor Density**
Not available.

**Volatility**
Not available.

**Odor Threshold**
Not available.

**Water/Oil Dist. Coeff.**
Not available.

**Ionicity (in Water)**
Not available.

*Continued on Next Page*
Clonidine HCl

Dispersion Properties
See solubility in water, methanol.

Solubility
Soluble in cold water, methanol. Insoluble in diethyl ether.

Section 10. Stability and Reactivity Data

Stability
The product is stable.

Instability Temperature
Not available.

Conditions of Instability
Excess heat, incompatible materials, exposure to light, dust generation.

Incompatibility with various substances
Reactive with oxidizing agents.

Corrosivity
Non-corrosive in presence of glass.

Section 11. Toxicological Information

Routes of Entry
Inhalation. Ingestion.

Toxicity to Animals
WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE.
Acute oral toxicity (LD50): 80 mg/kg [Rabbit].
Acute toxicity of the dust (LC50): 19.7 mg/m³ 4 hours [Rat].

Chronic Effects on Humans
Causes damage to the following organs: the nervous system, cardiovascular system, central nervous system (CNS).

Other Toxic Effects on Humans
Very hazardous in case of inhalation.
Hazardous in case of ingestion.
Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals
30 mg/kg LD50 oral Dog

Special Remarks on Chronic Effects on Humans
May cause adverse reproductive effects.

Special Remarks on other Toxic Effects on Humans
Acute Potential Health Effects:
Skin: May cause skin irritation.
Eyes: May cause eye irritation.
Inhalation: May be fatal if inhaled.
Ingestion: Harmful if swallowed. May cause nausea, vomiting, constipation, anorexia, abdominal pain. It affects the cardiovascular system (dysrhythmias, slowing of the pulse rate, slowing of the heart rate, hypotension followed by hypertension). May affect behavior/cenral nervous system (headache, sedation, drowsiness, dizziness, nervousness, agitation, mental depression, central nervous system depression, ataxia, aggression, insomnia, restlessness, hallucinations, fatigue, seizures, coma). May cause respiratory depression or apnea. May affect the blood (changes in clotting factor). May cause incontinence, and hyperglycemia.

Chronic Potential Health Effects:
Skin: Prolonged or repeated skin contact may cause allergic skin reaction.

Continued on Next Page
### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ecotoxicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>BOD5 and COD</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Products of Biodegradation</strong></td>
<td>Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.</td>
</tr>
<tr>
<td><strong>Toxicity of the Products of Biodegradation</strong></td>
<td>The products of degradation are as toxic as the product itself.</td>
</tr>
<tr>
<td><strong>Special Remarks on the Products of Biodegradation</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 13. Disposal Considerations

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Waste Disposal</strong></td>
<td>Waste must be disposed of in accordance with federal, state and local environmental control regulations.</td>
</tr>
</tbody>
</table>

### Section 14. Transport Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DOT Classification</strong></td>
<td>CLASS 6.1: Poisonous material.</td>
</tr>
<tr>
<td><strong>Identification</strong></td>
<td>UN2811 : Toxic solid, organic, n.o.s. (Clonidine Hydrochloride) : PG: III</td>
</tr>
<tr>
<td><strong>Special Provisions for Transport</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>DOT (Pictograms)</strong></td>
<td>![Poison Pictogram]</td>
</tr>
</tbody>
</table>

### Section 15. Other Regulatory Information and Pictograms

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Federal and State Regulations</strong></td>
<td>TSCA 8(b) inventory: No products were found.</td>
</tr>
<tr>
<td><strong>California Proposition 65 Warnings</strong></td>
<td>California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found. California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.</td>
</tr>
<tr>
<td><strong>Other Classifications</strong></td>
<td>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. R26- Very toxic by inhalation. R43- May cause sensitization by skin contact. S22- Do not breathe dust. S28- After contact with skin, wash immediately with plenty of water. S36/37- Wear suitable protective clothing and gloves. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</td>
</tr>
</tbody>
</table>

**Continued on Next Page**
Section 16. Other Information

MSDS Code  C4417

References  Not available.

Other Special Considerations  Not available.

Validated by Sonia Owen on 2/4/2013.

Verified by Sonia Owen.


Continued on Next Page
Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user’s responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.