



# Material Safety Data Sheet

<b>NFPA</b>  	<b>HMS</b>  <table border="1" style="margin: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">2</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">1</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	1	Reactivity	0	<b>Personal Protective Equipment</b>    See Section 15.
Health Hazard	2							
Fire Hazard	1							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
<b>Common Name/Trade Name</b>	<b>Clemastine Fumarate</b>	
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
<b>Commercial Name(s)</b>	Tavist; Agasten; Aloginan; Alphamin; Anhistan; Clemanil	
<b>Synonym</b>	Clemastine Fumarate; Clemastine Hydrogen Fumarate;	
<b>Chemical Name</b>	P y r r o l i d i n e , 2-(2-(p-chloro-alpha-methyl-alpha-phenylbenzyl)oxy)ethyl)-1-methyl-, (+)-, fumarate (1:1)	
<b>Chemical Family</b>	Not available.	
<b>Chemical Formula</b>	C21-H26-Cl-NO.C4-H4-O4	
<b>Supplier</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
	<b>Catalog Number(s).</b>	C2989, C1507
	<b>CAS#</b>	14976-57-9
	<b>RTECS</b>	UY0704600
	<b>TSCA</b>	TSCA 8(b) inventory: No products were found.
	<b>CI#</b>	Not available.
	<b><u>IN CASE OF EMERGENCY</u></b> <b><u>CHEMTREC (24hr) 800-424-9300</u></b>  CALL (310) 516-8000	

Section 2. Composition and Information on Ingredients					
		<i>Exposure Limits</i>			
Name	CAS #	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	% by Weight
1) Clemastine Fumarate	14976-57-9				100
<b>Toxicological Data on Ingredients</b>	<b>Clemastine Fumarate:</b> ORAL (LD50): Acute: 3550 mg/kg [Rat]. 730 mg/kg [Mouse].				

Section 3. Hazards Identification	
<b>Potential Acute Health Effects</b>	Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.
<b>Potential Chronic Health Effects</b>	<b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. The substance may be toxic to central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention.
<b>Skin Contact</b>	In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
<b>Serious Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	May be combustible at high temperature.
<b>Auto-Ignition Temperature</b>	Not available.
<b>Flash Points</b>	Not available.
<b>Flammable Limits</b>	Not available.
<b>Products of Combustion</b>	These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> ...), halogenated compounds.
<b>Fire Hazards in Presence of Various Substances</b>	Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
<b>Fire Fighting Media and Instructions</b>	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	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 and regional authority requirements.
<b>Large Spill</b>	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

**Section 7. Handling and Storage**

<b>Precautions</b>	Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. 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. Avoid contact with skin and eyes.
<b>Storage</b>	Light Sensitive. Heat Sensitive. Store in light resistant containers. Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 25°C (77°F).

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	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.
<b>Personal Protection</b>	Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	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.
<b>Exposure Limits</b>	Not available.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Solid.	<b>Odor</b>	Odorless.
<b>Molecular Weight</b>	459.97 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not available.	<b>Color</b>	Colorless to light yellow.
<b>Boiling Point</b>	Not available.		
<b>Melting Point</b>	178°C (352.4°F)		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	Not available.		
<b>Vapor Pressure</b>	Not applicable.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	Not available.		
<b>Solubility</b>	Very slightly soluble in cold water.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Excess heat, light
<b>Incompatibility with various substances</b>	Not available.

Continued on Next Page

**Corrosivity** Not available.

**Special Remarks on Reactivity** Sensitive to light.  
Heat sensitive.  
No more information found at this time

**Special Remarks on Corrosivity** Not available.

**Polymerization** Will not occur.

### Section 11. Toxicological Information

**Routes of Entry** Inhalation. Ingestion.

**Toxicity to Animals** Acute oral toxicity (LD50): 730 mg/kg [Mouse].

**Chronic Effects on Humans** May cause damage to the following organs: central nervous system (CNS).

**Other Toxic Effects on Humans** Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

**Special Remarks on Toxicity to Animals** Not available.

**Special Remarks on Chronic Effects on Humans** Not available.

**Special Remarks on other Toxic Effects on Humans** Aute Potential Health Effects:  
May cause skin irritation.  
Eyes: May cause eye irritation.  
Inhalation: May cause respiratory tract irritation with tightness of chest and wheezing, nasal stuffiness, and thickening of bronchial secretions  
Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, diarrhea, dry mouth, thirst. May affect behavior/central nervous system, and vision. Symptoms may include hallucinations, muscle contraction or spasticity, somnolence, excitement, change in motor activity, drowsiness, sedation, dizziness, impaired speech, incoordination, fixed dilated pupils, interference with color vision, blurred vision, fever, flushed face, hot dry skin. It may also affect cardiovascular system with tachycardia and hypotension.

### Section 12. Ecological Information

**Ecotoxicity** Not available.

**BOD5 and COD** 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 than the product itself.

**Special Remarks on the Products of Biodegradation** Not available.

### Section 13. Disposal Considerations

**Waste Disposal** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 14. Transport Information**

**DOT Classification** Not a DOT controlled material (United States).

**Identification** Not applicable.

**Special Provisions for Transport** Not applicable.

**DOT (Pictograms)**



**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations** No products were found.

**California Proposition 65 Warnings**

**Other Regulations** EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

**Other Classifications** **WHMIS (Canada)** Not controlled under WHMIS (Canada).

**DSCL (EEC)** R36/38- Irritating to eyes and skin. S2- Keep out of the reach of children. S46- If swallowed, seek medical advice immediately and show this container or label.

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

Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	E

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

Health	2	1	0	Flammability
				Reactivity
				Specific hazard

**WHMIS (Canada) (Pictograms)**



**DSCL (Europe) (Pictograms)**



**TDG (Canada) (Pictograms)**



**ADR (Europe) (Pictograms)**



**Protective Equipment**



Gloves



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent.



Splash goggles

**Section 16. Other Information****MSDS Code** C4409**References** Not available.**Other Special Considerations** Not available.

Validated by Sonia Owen on 5/1/2008.

Verified by Sonia Owen.

Printed 6/25/2008.

CALL (310) 516-8000

**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.*