



# Material Safety Data Sheet

<b>NFPA</b>	<b>HMS</b>	<b>Personal Protective Equipment</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: #FFCCCC;">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	
Health Hazard	2							
Fire Hazard	1							
Reactivity	0							
		See Section 15.						

<b>Section 1. Chemical Product and Company Identification</b>		Page Number: 1
<b>Common Name/Trade Name</b>	<b>Ondansetron Hydrochloride</b>	
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
<b>Commercial Name(s)</b>	Not available.	
<b>Synonym</b>	Ondansetron hydrochloride dihydrate	
<b>Chemical Name</b>	4H-Carbazol-4-one, 1,2,3,9-tetrahydro-9-methyl-3-[(2-methyl-1H-imidazol-1-yl)methyl]-, monohydrochloride, dihydrate (9CI)	
<b>Chemical Family</b>	Not available.	
<b>Chemical Formula</b>	C18-H19-N3-O.HCl.2H2O	
<b>Supplier</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
	<b>Catalog Number(s).</b>	O1370
	<b>CAS#</b>	103639-04-9; 99614-01-4 (anhydrous)
	<b>RTECS</b>	Not available.
	<b>TSCA</b>	TSCA 8(b) inventory: No products were found. Not listed on TSCA 8(b) Inventory.
	<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		

<b>Section 2. Composition and Information on Ingredients</b>					
Name	CAS #	<i>Exposure Limits</i>			% by Weight
		TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	
1) Ondansetron Hydrochloride, dihydrate	103639-04-9				100
<b>Toxicological Data on Ingredients</b>	<b>Ondansetron Hydrochloride(CAS no. 99614-01-4):</b> ORAL (LD50): Acute: 94.897mg/kg [Rat]. >45 mg/kg [Dog].				

<b>Section 3. Hazards Identification</b>	
<b>Potential Acute Health Effects</b>	Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Severe over-exposure can result in death.
<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. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

**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. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
<b>Serious Skin Contact</b>	Not available.
<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>	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.
<b>Ingestion</b>	If swallowed, 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 immediately.
<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.
<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.
<b>Large Spill</b>	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**

<b>Precautions</b>	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. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents.
<b>Storage</b>	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**

<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>	Safety glasses. 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. (Powdered solid.)	<b>Odor</b>	Not available.
<b>Molecular Weight</b>	365.86 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not available.	<b>Color</b>	White. Off-white.
<b>Boiling Point</b>	Not available.		
<b>Melting Point</b>	178°C (352.4F) - 179.5C.		
<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>	See solubility in water.		
<b>Solubility</b>	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, incompatible materials, light
<b>Incompatibility with various substances</b>	Reactive with oxidizing agents.
<b>Corrosivity</b>	Not available.

Continued on Next Page

**Special Remarks on Reactivity** Sensitive to light.

**Special Remarks on Corrosivity** Not available.

**Polymerization** Will not occur.

### Section 11. Toxicological Information

**Routes of Entry** Inhalation. Ingestion.

**Toxicity to Animals** For Ondansetron Hydrochloride, anhydrous (CAS no. 99614-01-4):  
Acute oral toxicity (LD50): >45 mg/kg [Dog].

**Chronic Effects on Humans** Not available.

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

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

**Special Remarks on Chronic Effects on Humans** May cause adverse reproductive effects based on animal test data.

**Special Remarks on other Toxic Effects on Humans** Acute Potential Health Effects:  
Skin: May cause skin irritation.  
Eyes: May cause eye irritation.  
Inhalation: May cause respiratory tract irritation.  
Ingestion: Harmful if swallowed. May cause nausea, vomiting, hiccups, constipation or diarrhea, dry mouth, fever, skin rash/hives, itching, anorexia. May affect behavior/central nervous system (headache, dizziness, malaise, fatigue, lightheadedness, agitation, anxiety, tremor, somnolence, drowsiness, convulsions/seizures), cardiovascular system (hypotension, bradycardia, liver (liver enzyme abnormalities).  
May cause allergic (anaphylactic) reactions (facial swelling, shortness of breath, bronchospasm, angioedema, laryngeal edema, hypotension).  
Chronic Potential Health Effects:  
Ingestion: May cause weight loss. May affect behavior/central nervous system, urinary system (urinary retention), the brain, pituitary gland and have symptoms similar to that of acute ingestion.  
Medical Conditions Aggravated by Exposure: Hypersensitivity to material or other selective 5-HT<sub>3</sub> receptor antagonists.

### 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 as toxic as 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**

<b>DOT Classification</b>	CLASS 6.1: Poisonous material.
<b>Identification</b>	UNNA: 2811 : Toxic solid, organic, n.o.s. (Ondansetron hydrochloride) PG: III
<b>Special Provisions for Transport</b>	Not available.
<b>DOT (Pictograms)</b>	

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

<b>Federal and State Regulations</b>	No products were found.										
<b>California Proposition 65 Warnings</b>	<p>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.</p> <p>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.</p>										
<b>Other Regulations</b>	<p>OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).</p> <p>EINECS: This product is not on the European Inventory of Existing Commercial Chemical Substances</p> <p>Canada: Not listed on Canadian Domestic Substance List (DSL) or Canadian Non- Domestic Substance List (NDSL).</p> <p>China: Not listed on National Inventory.</p> <p>Japan: Not listed on National Inventory (ENCS).</p> <p>Korea: Not listed on National Inventory (KECI).</p> <p>Philippines: Not listed on National Inventory (PICCS).</p> <p>Australia: Not listed on AICS.</p>										
<b>Other Classifications</b>	<b>WHMIS (Canada)</b>	CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).									
	<b>DSCL (EEC)</b>	R25- Toxic if swallowed.	S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).								
<b>HMS (U.S.A.)</b>	<table border="1"> <tr><td>Health Hazard</td><td>2</td></tr> <tr><td>Fire Hazard</td><td>1</td></tr> <tr><td>Reactivity</td><td>0</td></tr> <tr><td>Personal Protection</td><td>E</td></tr> </table>	Health Hazard	2	Fire Hazard	1	Reactivity	0	Personal Protection	E	<b>National Fire Protection Association (U.S.A.)</b>	 <p>Health: 2, Flammability: 1, Reactivity: 0, Specific hazard: E</p>
Health Hazard	2										
Fire Hazard	1										
Reactivity	0										
Personal Protection	E										
<b>WHMIS (Canada) (Pictograms)</b>											
<b>DSCL (Europe) (Pictograms)</b>											
<b>TDG (Canada) (Pictograms)</b>											

**ADR (Europe)  
(Pictograms)**



**Protective Equipment**



Gloves



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Safety glasses

**Section 16. Other Information**

**MSDS Code** O5702

**References** Not available.

**Other Special Considerations** Major Use: Drug - used as an antiemetic

Validated by Sonia Owen on 3/2/2009.

Verified by Sonia Owen.

Printed 3/16/2009.

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.*