



# Material Safety Data Sheet

<b>NFPA</b>  	<b>HMIS</b>  <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; font-weight: bold;">2</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; font-weight: bold;">1</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; font-weight: bold;">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							

<b>Section 1. Chemical Product and Company Identification</b>		<i>Page Number: 1</i>										
<b>Common Name/Trade Name</b>	<b>Methyclothiazide</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td><b>Catalog Number(s).</b></td> <td>M1158</td> </tr> <tr> <td><b>CAS#</b></td> <td>135-07-9</td> </tr> <tr> <td><b>RTECS</b></td> <td>DK7U75000</td> </tr> <tr> <td><b>TSCA</b></td> <td>TSCA 8(b) inventory: No products were found.</td> </tr> <tr> <td><b>CI#</b></td> <td>Not available.</td> </tr> </table>	<b>Catalog Number(s).</b>	M1158	<b>CAS#</b>	135-07-9	<b>RTECS</b>	DK7U75000	<b>TSCA</b>	TSCA 8(b) inventory: No products were found.	<b>CI#</b>	Not available.
<b>Catalog Number(s).</b>	M1158											
<b>CAS#</b>	135-07-9											
<b>RTECS</b>	DK7U75000											
<b>TSCA</b>	TSCA 8(b) inventory: No products were found.											
<b>CI#</b>	Not available.											
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>IN CASE OF EMERGENCY</b> <a href="tel:8004249300">CHEMTREC (24hr) 800-424-9300</a>  CALL (310) 516-8000										
<b>Commercial Name(s)</b>	Aquatensen, Enduron											
<b>Synonym</b>	Chlorothiazide; Cyclothiazide; Hydrochlorothiazide; Benzthiazide											
<b>Chemical Name</b>	2H-1,2,4-Benzothiadiazine-7-sulfonamide,6-chloro-3-(chloromethyl)-3,1,1-dioxide											
<b>Chemical Family</b>	A Benzothiadiazine(Benzothiazine)											
<b>Chemical Formula</b>	C9-H11-Cl2-N3-O4-S2											
<b>Supplier</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248											

<b>Section 2. Composition and Information on Ingredients</b>					
		<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) Methyclothiazide	135-07-9				100
<b>Toxicological Data on Ingredients</b>	<b>Methyclothiazide:</b> ORAL (LD50): Acute: >10000 mg/kg [Mouse]. >4000 mg/kg [Rat].				

<b>Section 3. Hazards Identification</b>	
<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>	Slightly hazardous in case of skin contact (sensitizer). <b>CARCINOGENIC EFFECTS:</b> Not available. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available.

**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> ...), sulfur oxides (SO <sub>2</sub> , SO <sub>3</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**

**Precautions** 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.

**Storage** Keep container tightly closed. Keep container in a cool, well-ventilated area.

**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** Splash goggles. 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**

<b>Physical state and appearance</b>	Solid. (Crystalline powder.)	<b>Odor</b>	Odorless or has slight odor
<b>Molecular Weight</b>	360.24 g/mole	<b>Taste</b>	Tasteless.
<b>pH (1% soln/water)</b>	Not available.	<b>Color</b>	White. Off-white.
<b>Boiling Point</b>	Not available.		
<b>Melting Point</b>	225°C (437°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>	The product is more soluble in oil; $\log(\text{oil/water}) = 1.4$		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	See solubility in water, methanol, acetone.		
<b>Solubility</b>	Easily soluble in acetone. Partially soluble in methanol. Very slightly soluble in cold water, hot water. Slightly soluble in alcohol. Very slightly soluble in chloroform, isopropyl alcohol, and benzene. Freely soluble in pyridine.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Not available.
<b>Incompatibility with various substances</b>	Not available.
<b>Corrosivity</b>	Not available.
<b>Special Remarks on Reactivity</b>	Chars slightly below 220 deg. C When heated to decomposition it emits very toxic fumes of sulfoxides, nitroxides, and hydrogen chloride.
<b>Special Remarks on Corrosivity</b>	Not available.
<b>Polymerization</b>	Will not occur.

**Section 11. Toxicological Information**

<b>Routes of Entry</b>	Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): >4000 mg/kg [Rat].
<b>Chronic Effects on Humans</b>	Not available.
<b>Other Toxic Effects on Humans</b>	Hazardous in case of skin contact (irritant), of ingestion, of inhalation.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	May affect genetic material.
<b>Special Remarks on other Toxic Effects on Humans</b>	<p>Acute Potential Health Effects:</p> <p>Skin: May cause skin irritation.</p> <p>Eyes: May cause eye irritation.</p> <p>Inhalation: May cause respiratory tract irritation.</p> <p>Ingestion: May cause gastrointestinal tract irritation with nausea, vomiting, anorexia, diarrhea, weight loss, cramping, and constipation. It may also affect the liver (jaundice (intrahepatic cholestatic)), pancreas (pancreatitis), and blood(leukopenia, agranulocytosis, thrombocytopenia, aplastic anemia), as well as cause electrolyte imbalance characterized by dry mouth, increased thirst, behavior/central nervous system effects(dizziness, vertigo, paresthesia, headache, xanthopsia, muscle cramps or pain, unusual tiredness or weakness, lethargy, restlessness, muscle spasm, mood or mental changes), urinary system effects( increased urination), cardiovascular system effects (irregular heartbeat, orthostatic hypotension, and weak pulse). Other symptoms may include hyperglycemia, glycosuria, hypercalcemia.</p> <p>Chronic Potential Health Effects:</p> <p>Possible allergic reaction reaction to material if inhaled, ingested or in contact with skin. Symptoms of hypersensitivity may include purpura, photosensitivity, rash, urticaria, necrotizing angitis, Stevens-Johnson syndrome, respiratory distress including pneumonitis, and pulmonary edema.</p> <p>Cross Sensitivity: Persons sensitive to other sulfonamide-type medications, bumetanide, furoemide, or carbonic anhydrase inhibitors may be sensitive to this material also.</p>


**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation</b>	The products of degradation are more toxic than the product itself.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.





**Section 13. Disposal Considerations**

<b>Waste Disposal</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
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**Section 14. Transport Information**

<b>DOT Classification</b>	Not a DOT controlled material (United States).
<b>Identification</b>	Not applicable.
<b>Special Provisions for Transport</b>	Not applicable.
<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>													
<b>Other Regulations</b>	EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.												
<b>Other Classifications</b>	<b>WHMIS (Canada)</b>	Not controlled under WHMIS (Canada).											
	<b>DSCL (EEC)</b>	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.											
<b>HMIS (U.S.A.)</b>	<table border="1" style="display: inline-table;"> <tr><td>Health Hazard</td><td style="text-align: center;">2</td></tr> <tr><td>Fire Hazard</td><td style="text-align: center;">1</td></tr> <tr><td>Reactivity</td><td style="text-align: center;">0</td></tr> <tr><td>Personal Protection</td><td style="text-align: center;">E</td></tr> </table>	Health Hazard	2	Fire Hazard	1	Reactivity	0	Personal Protection	E	<p><b>National Fire Protection Association (U.S.A.)</b></p> <table style="display: inline-table;"> <tr> <td style="text-align: center;">Health</td> <td style="text-align: center;">  </td> <td style="text-align: center;">                 Flammability Reactivity Specific hazard             </td> </tr> </table>	Health		Flammability Reactivity Specific hazard
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<b>WHMIS (Canada) (Pictograms)</b>													

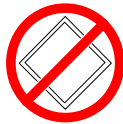
**DSCL (Europe)  
(Pictograms)**



**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** M3773

**References** Not available.

**Other Special Considerations** Not available.

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

Printed 9/12/2006.

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.*