

# 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: #FFCCCC;">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							

Section 1. Chemical Product and Company Identification		Page Number: 1
<b>Common Name/Trade Name</b>	<b>Epinephrine</b>	<b>Catalog Number(s).</b> EP130 <b>CAS#</b> 51-43-4 <b>RTECS</b> DO2625000 <b>TSCA</b> TSCA 8(b) inventory: Epinephrine <b>CI#</b> Not available.
<b>Manufacturer</b>	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	<b>IN CASE OF EMERGENCY</b> <b>CHEMTREC (24hr) 800-424-9300</b>  CALL (310) 516-8000
<b>Commercial Name(s)</b>	Not available.	
<b>Synonym</b>	4-[1-Hydroxy-2-(methylamino)ethyl]-1,2-benzenediol	
<b>Chemical Name</b>		
<b>Chemical Family</b>	Not available.	
<b>Chemical Formula</b>	C9H13NO3	
<b>Supplier</b>	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

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) Epinephrine	51-43-4				100
<b>Toxicological Data on Ingredients</b>	<b>Epinephrine:</b> DERMAL (LD50): Acute: 62 mg/kg [Rat].				

Section 3. Hazards Identification	
<b>Potential Acute Health Effects</b>	Very hazardous in case of eye contact (irritant). Hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching.
<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 an 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. Do not use an eye ointment. Seek medical attention.
<b>Skin Contact</b>	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. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing.
<b>Serious Skin Contact</b>	Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.
<b>Inhalation</b>	Allow the victim to rest in a well ventilated area. Seek immediate 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>	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.
<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> ...).
<b>Fire Hazards in Presence of Various Substances</b>	Not available.
<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>	Use a shovel to put the material into a convenient waste disposal container.

**Section 7. Handling and Storage**

<b>Precautions</b>	Keep locked up. 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. 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>	Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Highly toxic or infectious materials should be stored in a separate locked safety storage cabinet or room.

**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>	Not available.
<b>Molecular Weight</b>	183.23 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not available.	<b>Color</b>	Not available.
<b>Boiling Point</b>	Decomposes. (215°C or 419°F)		
<b>Melting Point</b>	211.5°C (412.7°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>	Not available.		

**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.

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

**Special Remarks on Reactivity** Not available.

**Special Remarks on Corrosivity** Not available.

**Polymerization** No.

**Section 11. Toxicological Information**

**Routes of Entry** Dermal contact. Eye contact. Inhalation. Ingestion.

**Toxicity to Animals** Acute dermal toxicity (LD50): 62 mg/kg [Rat].

**Chronic Effects on Humans** Not available.

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

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

**Special Remarks on Chronic Effects on Humans** Embryotoxic and/or foetotoxic in animal.

**Special Remarks on other Toxic Effects on Humans** Not available.

**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.

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

**Section 13. Disposal Considerations**

**Waste Disposal**

**Section 14. Transport Information**

**DOT Classification** CLASS 6.1: Poisonous material.

**Identification** : Toxic solid, organic, n.o.s. (Epinephrine) : UN2811 PG: III

**Special Provisions for Transport** Not available.

**DOT (Pictograms)**



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

**Federal and State Regulations**

Pennsylvania RTK: Epinephrine  
 Minnesota: Epinephrine  
 New Jersey: Epinephrine  
 TSCA 8(b) inventory: Epinephrine  
 CERCLA: Hazardous substances.: Epinephrine

**California Proposition 65 Warnings**

**Other Regulations**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

**Other Classifications**

**WHMIS (Canada)** CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).  
 CLASS D-2B: Material causing other toxic effects (TOXIC).  
**DSCL (EEC)** R24- Toxic in contact with skin.  
 R38- Irritating to skin.  
 R41- Risk of serious damage to eyes.

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

Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	E

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

Health 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. Wear appropriate respirator when ventilation is inadequate.



Splash goggles.

### Section 16. Other Information

**MSDS Code** E3080

**References** Not available.

**Other Special Considerations** Not available.

Validated by Sonia Owen on 1/20/2003.

Verified by Sonia Owen.

Printed 1/21/2003.

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.*