



Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment
210	Health Hazard 2 Fire Hazard 1	
	Reactivity	See Section 15.

Section 1. Chemical Product and Company Identification			Page Number: 1	
Common Name/ Trade Name	Pyrrolidine dithiocarbamate ammonium salt	Catalog Number(s).	P1475	
	Sail	CAS#	5108-96-3	
Manufacturer	SPECTRUM CHEMICAL MFG. CORP.	RTECS	Not available.	
	14422 S. SAN PEDRO STREET GARDENA, CA 90248	TSCA	TSCA 8(b) inventory: Pyrrolidine dithiocarbamate ammonium salt	
Commercial Name(s)	Not available.	CI#	Not available.	
Synonym	Not available.	DI GAGE OF		
Chemical Name		-	EMERGENCY (24hr) 800-424-9300	
Chemical Family	Not available.	CALL (310) 51	16-8000	
Chemical Formula	C5H9NS2.NH3			
Supplier	SPECTRUM CHEMICAL MFG. CORP. 14422 S. SAN PEDRO STREET GARDENA, CA 90248			

				Exposure Limits		
Name		CAS#	TWA (mg/m³)	STEL (mg/m³)	CEIL (mg/m³)	% by Weight
1) Pyrrolidine dithiocarbamate ammonium salt		5108-96-3				100

Section 3. Hazards identification	on
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Potential Acute Health Effects Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous

in case of skin contact (permeator).

Potential Chronic Health
Effects

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Not available.

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MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Not available.

The substance is toxic to the nervous system, liver, endocrine.

Repeated or prolonged exposure to the substance can produce target organs damage.

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salt	

Section 4. First A	id 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 medical attention.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Serious Inhalation	Not available.
Ingestion	Do not induce vomiting. 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), sulfur oxides (SO2, SO3).	
Fire Hazards in Presence of Various Substances	Not available.	
Explosion Hazards in Presence of Various Substances	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.	
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.	
Special Remarks on Fire Hazards	Not available.	
Special Remarks on Explosion Hazards	Not available.	

Small Spill 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. 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.

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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 breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes
Storage	Keep container dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

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 a	nd Chemical Properties		
Physical state and appearance	Solid. (Solid crystalline powder.)	Odor	Not available.
Molecular Weight	164.28 g/mole	Taste	Not available.
pH (1% soln/water)	Not available.	Color	Off-white.
Boiling Point	Decomposes.		
Melting Point	153°C (307.4°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.		
Dispersion Properties	See solubility in water.		
Solubility	Soluble in cold water.		

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Section 10. Stability and Reactivity Data		
Stability	The product is stable.	
Instability Temperature	Not available.	
Conditions of Instability	Not available.	
Incompatibility with various substances	Not available.	
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	Eye contact. Inhalation. Ingestion.	
Toxicity to Animals	LD50: Not available. LC50: Not available.	
Chronic Effects on Humans	The substance is toxic to the nervous system, liver, endocrine.	
Other Toxic Effects on Humans	Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).	
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	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.	

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Specific hazard

Section 13. Disposal Considerations

Waste Disposal

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 ${\sf TSCA~8(b)~inventory:~Pyrrolidine~dithiocarbamate~ammonium~salt}$

Proposition 65 Warnings **Other Regulations** OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). Other Classifications WHMIS (Canada) Not controlled under WHMIS (Canada). DSCL (EEC) R36/38- Irritating to eyes and skin. **Health Hazard** 2 HMIS (U.S.A.) **National Fire Protection** Flammability **Association (U.S.A.)** Fire Hazard 1 Health Reactivity Reactivity 0

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WHMIS (Canada) (Pictograms)



Personal Protection

DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



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Pyrrolidine dithiocarbamate ammonium salt

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 P4910

References Not available.

Other Special Not available.

Considerations

Validated by Sonia Owen on 8/11/2006.

Verified by Sonia Owen.

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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.