





# Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table><tr><td>Health Hazard</td><td>2</td></tr><tr><td>Fire Hazard</td><td>0</td></tr><tr><td>Reactivity</td><td>0</td></tr></table>	Health Hazard	2	Fire Hazard	0	Reactivity	0	<div></div> <div>See Section 15.</div>
Health Hazard	2							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification			Page Number: 1	
Common Name/ Trade Name	Sodium Cyanide, 10% (w/v)		Catalog Number(s).	S-902
			CAS#	Mixture.
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248		RTECS	Not applicable.
			TSCA	TSCA 8(b) inventory: Water; Sodium Cyanide
Commercial Name(s)	Not available.		CI#	Not available.
Synonym			<b><u>IN CASE OF EMERGENCY</u></b> <b><u>CHEMTREC (24hr) 800-424-9300</u></b>  CALL (310) 516-8000	
Chemical Name	Not applicable.			
Chemical Family	Not available.			
Chemical Formula	Not applicable.			
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248			

Section 2. Composition and Information on Ingredients					
		Exposure Limits			
Name	CAS #	TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	% by Weight
1) Water	7732-18-5				90
2) Sodium Cyanide	143-33-9			4.7	10
Toxicological Data on Ingredients		Sodium Cyanide: ORAL (LD50): Acute: 6.44 mg/kg [Rat]. DERMAL (LD50): Acute: 10.4 mg/kg [Rabbit].			

Section 3. Hazards Identification	
Potential Acute Health Effects	Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, . Slightly hazardous in case of skin contact (permeator). Severe over-exposure can result in death.
Potential Chronic Health Effects	<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 skin, eyes, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

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**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 immediately.
<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. Cold water may be used. 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 immediate 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>	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>	Non-flammable.
<b>Auto-Ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	Non-explosive in presence of open flames and sparks, of shocks.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Fusion mixtures of metal cyanides with metal chlorates, perchlorated or nitrates causes a violent explosion (Sodium Cyanide)

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
<b>Large Spill</b>	Poisonous liquid. 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. Call for assistance on disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

**Section 7. Handling and Storage**

<b>Precautions</b>	Do not ingest. Do not breathe gas/fumes/ vapor/spray. 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>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F).

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

<b>Engineering Controls</b>	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.
<b>Personal Protection</b>	Splash goggles. Lab coat. Vapor 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. Vapor 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>	<b>Sodium Cyanide</b> STEL: 5 (mg/m <sup>3</sup> ) from ACGIH (TLV) [United States] SKIN CEIL: 4.7 from NIOSH CEIL: 5 (mg/m <sup>3</sup> ) from NIOSH  Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Liquid.	<b>Odor</b>	Not available.
<b>Molecular Weight</b>	Not applicable.	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Neutral.	<b>Color</b>	Colorless.
<b>Boiling Point</b>	The lowest known value is 100°C (212°F) (Water).		
<b>Melting Point</b>	Not available.		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	Weighted average: 1.04 (Water = 1)		
<b>Vapor Pressure</b>	The highest known value is 2.3 kPa (@ 20°C) (Water).		
<b>Vapor Density</b>	The highest known value is 0.62 (Air = 1) (Water).		
<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>	Easily 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>	Incompatibles
<b>Incompatibility with various substances</b>	Slightly reactive to reactive with oxidizing agents, acids.
<b>Corrosivity</b>	Slightly corrosive in presence of aluminum. Non-corrosive in presence of glass.
<b>Special Remarks on Reactivity</b>	Violent reaction with fluorine gas, magnesium, nitrates, nitric acid. Dangerous on contact with acids, acid fumes, water or stream. It will produce toxic and flammable vapors of CN-H and sodium oxide. Cyanide may react with CO <sub>2</sub> in ordinary air to form toxic hydrogen cyanide gas. Strong oxidizers such as acids, acid salts, chlorates, and nitrates. Contact with acids and acid salts causes immediate formation of toxic and flammable hydrogen cyanide gas. (Sodium Cyanide)
<b>Special Remarks on Corrosivity</b>	Not available.
<b>Polymerization</b>	Will not occur.

**Section 11. Toxicological Information**

<b>Routes of Entry</b>	Absorbed through skin. Eye contact.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD <sub>50</sub> ): 64 mg/kg (Rat) (Calculated value for the mixture). Acute dermal toxicity (LD <sub>50</sub> ): 104 mg/kg (Rabbit) (Calculated value for the mixture).
<b>Chronic Effects on Humans</b>	Contains material which may cause damage to the following organs: skin, eyes, central nervous system (CNS).
<b>Other Toxic Effects on Humans</b>	Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	May cause adverse reproductive effects and birth defects based on animal data.
<b>Special Remarks on other Toxic Effects on Humans</b>	Acute Potential Health effects: Skin: May cause itching and irritation. May be fatal if absorbed through injured skin with symptoms similar to those noted for inhalation and ingestion. Eyes: May cause eye irritation and eye damage. Inhalation: May cause respiratory tract irritation. May be fatal if inhaled. The substance inhibits cellular respiration causing metabolic asphyxiation. May cause headache, weakness, dizziness, labored breathing, nausea, vomiting. May be followed by cardiovascular effects, unconsciousness, convulsions, coma, and death. Ingestion: May be fatal if swallowed. May cause gastrointestinal tract irritation with nausea, vomiting. May affect behavior and nervous systems (seizures, convulsions, change in motor activity, headache, dizziness, confusion, weakness stupor, anxiety, agitation, tremors), cardiovascular system, respiration (hyperventilation, pulmonary edema, breathing difficulty, respiratory failure), cardiovascular system (palpitations, rapid heart beat, hypertension, hypotension). Massive doses may produce sudden loss of consciousness and prompt death from respiratory arrest. Smaller but still lethal doses may prolong the illness for 1 or more hours. A bitter almond odor may be noted on the breath or vomitus. Chronic Potential Health Effects: Central Nervous system effects (headaches, vertigo, insomnia, memory loss, tremors, fatigue), fatigue, metabolic effects (poor appetite), cardiovascular effects (chest discomfort, palpitations), nerve damage to the eyes, or dermatitis, respiratory tract irritation, eye irritation, or death can occur. (Sodium Cyanide)


**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 less 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.
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**Section 14. Transport Information**

DOT Classification	CLASS 6.1: Poisonous material.
Identification	: Cyanide Solution, n.o.s. (Sodium Cyanide) (Sodium Cyanide) UNNA: 1935 PG: III
Special Provisions for Transport	Marine Pollutant (Sodium Cyanide)
DOT (Pictograms)	

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

Federal and State Regulations	<p>Connecticut carcinogen reporting list.: Sodium Cyanide          Illinois chemical safety act: Sodium Cyanide          New York release reporting list: Sodium Cyanide          Rhode Island RTK hazardous substances: Sodium Cyanide          Pennsylvania RTK: Sodium Cyanide          Minnesota: Sodium Cyanide          Massachusetts RTK: Sodium Cyanide          Massachusetts spill list: Sodium Cyanide          New Jersey: Sodium Cyanide          New Jersey spill list: Sodium Cyanide          Louisiana RTK reporting list: Sodium Cyanide          Louisiana spill reporting: Sodium Cyanide          California Director's List of Hazardous Substances: Sodium Cyanide          TSCA 8(b) inventory: Water; Sodium Cyanide          TSCA 4(a) final test rules: Sodium Cyanide          TSCA 8(a) PAIR: Sodium Cyanide          TSCA 8(d) H and S data reporting: Sodium Cyanide          TSCA 12(b) one time export: Sodium Cyanide          SARA 302/304/311/312 extremely hazardous substances: Sodium Cyanide          CERCLA: Hazardous substances.: Sodium Cyanide: 10 lbs. (4.536 kg);</p>
California Proposition 65 Warnings	<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>
Other Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

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## Other Classifications

## WHMIS (Canada)

Not controlled under WHMIS (Canada).

## DSCL (EEC)

R27/28- Very toxic in contact with skin and if swallowed.  
 R41- Risk of serious damage to eyes.

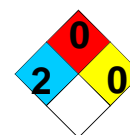
S1/2- Keep locked up and out of the reach of children.  
 S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S28- After contact with skin, wash immediately with plenty of water  
 S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.  
 S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
 S46- If swallowed, seek medical advice immediately and show this container or label.

## HMIS (U.S.A.)

Health Hazard	2
Fire Hazard	0
Reactivity	0
Personal Protection	h

## 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.



Vapor 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** S0164**References** Not available.**Other Special Considerations** Not available.

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.*