



Material Safety Data Sheet

NFPA 	HMIS <table border="1" style="margin: auto;"> <tr><td style="background-color: #00FFFF;">Health Hazard</td><td style="text-align: center; border: 1px solid black;">3</td></tr> <tr><td style="background-color: #FFCCCC;">Fire Hazard</td><td style="text-align: center; border: 1px solid black;">2</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	3	Fire Hazard	2	Reactivity	0	Personal Protective Equipment  See Section 15.
Health Hazard	3							
Fire Hazard	2							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
Common Name/Trade Name	Cresols	Catalog Number(s). YY1401, CR112
		CAS# 1319-77-3
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	RTECS GO5950000
Commercial Name(s)	Not available.	TSCA TSCA 8(b) inventory: Cresols
Synonym	Cresylic acid; Methyl Phenol; Tricresol	CI# Not available.
Chemical Name		<u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u> CALL (310) 516-8000
Chemical Family	Not available.	
Chemical Formula	C7H8O	
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Cresols	1319-77-3	22			100
Toxicological Data on Ingredients					
Cresols: ORAL (LD50): Acute: 1454 mg/kg [Rat]. 760 mg/kg [Mouse]. 860 mg/kg [Mouse]. DERMAL (LD50): Acute: 2000 mg/kg [Rabbit]. 242 mg/kg [Rat].					

Section 3. Hazards Identification	
Potential Acute Health Effects	Very hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation. Hazardous in case of skin contact (corrosive), of eye contact (corrosive). Liquid or spray mist may produce tissue damage particularly on mucous membranes of eyes, mouth and respiratory tract. Skin contact may produce burns. Inhalation of the spray mist may produce severe irritation of respiratory tract, characterized by coughing, choking, or shortness of breath. Severe over-exposure can result in death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.

Potential Chronic Health Effects

CARCINOGENIC EFFECTS: Not available.
MUTAGENIC EFFECTS: Not available.
TERATOGENIC EFFECTS: Not available.
DEVELOPMENTAL TOXICITY: Not available.
 The substance may be toxic to kidneys, liver, skin.
 Repeated or prolonged exposure to the substance can produce target organs damage. Repeated or prolonged contact with spray mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to spray mist may produce respiratory tract irritation leading to frequent attacks of bronchial infection. 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**Eye Contact**

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.

Skin Contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.

Serious Skin Contact

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Serious Inhalation

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. **WARNING:** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.

Ingestion

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.

Serious Ingestion

Not available.

Section 5. Fire and Explosion Data**Flammability of the Product**

Combustible.

Auto-Ignition Temperature

599°C (1110.2°F)

Flash Points

CLOSED CUP: 82°C (179.6°F).

Flammable Limits

LOWER: 1.35%

Products of Combustion

These products are carbon oxides (CO, CO₂).

Fire Hazards in Presence of Various Substances

Flammable in presence of open flames and sparks, of heat.

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.

Section 6. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
Large Spill	Combustible material. Corrosive liquid. Poisonous liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Use water spray curtain to divert vapor drift. 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

Precautions	Keep container dry. Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Never add water to this product. 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. Keep away from incompatibles such as oxidizing agents, alkalis.
Storage	Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Sensitive to light. Store in light-resistant containers.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Face shield. Full suit. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. Boots. Respiratory protection is not necessary for normal handling. Good room ventilation or use of local exhaust (fume hood) is sufficient. Use a vapor respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapor, inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.
Personal Protection in Case of a Large Spill	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.
Exposure Limits	TWA: 5 (ppm) from OSHA (PEL) [United States] TWA: 5 (ppm) from ACGIH (TLV) [United States] TWA: 5 (mg/m ³) from NIOSH [United States] TWA: 5 (ppm) [Canada] TWA: 22 (mg/m ³) [Canada] TWA: 22 (mg/m ³) from OSHA (PEL) [United States] Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid. (Hygroscopic liquid.)	Odor	Phenolic; Sweet; Tarry
Molecular Weight	108.14 g/mole	Taste	Pungent.
pH (1% soln/water)	Not available.	Color	Colorless to light yellow.
Boiling Point	191°C (375.8°F) - 203 C.		
Melting Point	11°C (51.8°F) - 35 C.		
Critical Temperature	Not available.		
Specific Gravity	1.03 - 1.04(Water = 1)		
Vapor Pressure	0 kPa (@ 20°C)		
Vapor Density	3.72 (Air = 1)		
Volatility	Not available.		
Odor Threshold	Not available.		

Continued on Next Page

Water/Oil Dist. Coeff.	Not available.
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water.
Solubility	Partially soluble in cold water. Sol in about 50 parts water Solubility in Water: 25 g/L at 25 deg. C. Miscible with alcohol, benzene, ether, glycerol, petroleum ether; also sol in solutions of fixed alkali hydroxides SOL IN VEGETABLE OILS

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Heat, ignition sources, incompatible materials
Incompatibility with various substances	Not available.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Sensitive to light. Will darken when exposed to light or air.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Dermal contact. Eye contact. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 760 mg/kg [Mouse]. Acute dermal toxicity (LD50): 242 mg/kg [Rat].
Chronic Effects on Humans	May cause damage to the following organs: kidneys, liver, skin.
Other Toxic Effects on Humans	Very hazardous in case of skin contact (irritant, permeator), of ingestion, . Hazardous in case of skin contact (corrosive), of eye contact (corrosive), of inhalation (lung corrosive).
Special Remarks on Toxicity to Animals	Not available.
Special Remarks on Chronic Effects on Humans	May cause adverse reproductive effects and birth defects (teratogenic) based on animal test data.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Corrosive. Causes severe irritation and burns. It can be absorbed through the skin in harmful or lethal amounts and cause system effects and affect behavior/central nervous system (tetany, somnolence) Eyes: Corrosive. Causes severe irritation and burns. It may cause blindness. Inhalation: It can cause severe irritation and/or burns to the respiratory tract. It may cause pulmonary edema, bronchopneumonia, pulmonary hemorrhages and other systemic effects. Ingestion: Cresol is a corrosive and can cause digestive/gastrointestinal tract burns. It is also a systemic poison, similar to phenol, because it can denature proteins. General symptoms of acute cresol poisoning are muscle weakness, gastrointestinal distress, CNS depression, cardiovascular collapse, and kidney, liver, and heart damage. Cresol can induce METHEMOGLOBINEMIA. In cresol poisoning, the induction of methemoglobinemia may be secondary to lysis of the red blood cells. The common appearance of casts in the urine suggests that hemolysis is the primary effect, and that methemoglobin induction occurs intravascularly following red blood cell lysis Chronic Potential Health Effects: Cresol can cause systemic poisoning with repeated exposure to low concentrations. General symptoms are, vomiting, difficulty swallowing, diarrhea, loss of appetite and weight, headache, nervousness, faintness, dizziness, mental disturbances, skin eruptions, jaundice, and liver and kidney damage. Occupational exposure via skin contact has caused eczema or skin allergy. Inhalaing cresol may decrease blood hemoglobin levels, lower red blood cell counts, thrombocytopenia, and leukopenia and may affect the endocrine system.


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.
-----------------------	--

Section 14. Transport Information

DOT Classification	CLASS 6.1: Poisonous material. Class 8: Corrosive material
Identification	UNNA: 2076 : Cresol, liquid PG: II
Special Provisions for Transport	Not available.
DOT (Pictograms)	

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations	<p>New York release reporting list: Cresols Rhode Island RTK hazardous substances: Cresols Pennsylvania RTK: Cresols Minnesota: Cresols Massachusetts RTK: Cresols New Jersey: Cresols California Director's List of Hazardous Substances: Cresols TSCA 8(b) inventory: Cresols SARA 313 toxic chemical notification and release reporting: Cresols CERCLA: Hazardous substances.: Cresols: 100 lbs. (45.36 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	<p>OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 215-293-2). Canada: Listed on Canadian Domestic Substance List (DSL). China: Listed on National Inventory. Japan: Listed on National Inventory (ENCS). Korea: Listed on National Inventory (KECI). Philippines: Listed on National Inventory (PICCS). Australia: Listed on AICS.</p>

Other Classifications

WHMIS (Canada)

CLASS B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).
 CLASS D-1A: Material causing immediate and serious toxic effects (VERY TOXIC).
 CLASS E: Corrosive liquid.

DSCL (EEC)

R24/25- Toxic in contact with skin and if swallowed.
 R34- Causes burns.

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).

HMIS (U.S.A.)

Health Hazard	3
Fire Hazard	2
Reactivity	0
Personal Protection	0

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

Health



Flammability

Reactivity

Specific hazard

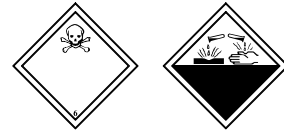
WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



ADR (Europe) (Pictograms)



Protective Equipment



Gloves.



Full suit.



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



Face shield.

Section 16. Other Information**MSDS Code** C4770**References** Not available.

Other Special Considerations Major Uses: For making synthetic resins; in disinfectants and fumigants; as industrial solvent. In manufacture of tricresyl phosphate; ore flotation; textile scouring agent; organic intermediate, manufacture of salicylaldehyde, coumarin, herbicides and surfactant. Wide use in degreasing compound, paintbrush cleaners, & additives to lubricating oils. Cresol, as a mixture, is used as an ore flotation agent; as a disinfectant; and in the manufacture of synthetic resins, chemicals, dyes, and antioxidants.

Validated by Sonia Owen on 10/6/2009.

Verified by Sonia Owen.

Printed 10/9/2009.

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.