



Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table border="1" style="margin: auto;"> <tr> <td style="background-color: #00b0f0;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">2</td> </tr> <tr> <td style="background-color: #ff6666;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">1</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	2	Fire Hazard	1	Reactivity	0	 See Section 15.
Health Hazard	2							
Fire Hazard	1							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
Common Name/Trade Name	Pyrocatechol	
Manufacturer	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
Commercial Name(s)	C.I. 76500; Durafur developer C; Fouramine PCH; Fouramine C	
Synonym	Catechol; 1,2-Dihydroxybenzene; Pyrocatechin; 2-Hydroxyphenol; Benzene, o-dihydroxy-; o-Benzenediol; o-Dihydroxybenzene; o-Dioxybenzene; o-Diphenol; o-Hydroquinone; o-Hydroxyphenol; o-Phenylenediol; Oxyphenic acid; Phthalhydroquinone; Pyrocatechine; Pyrocatechin	
Chemical Name	1,2-Benzenediol	
Chemical Family	Not available.	
Chemical Formula	C6H6O2	
Supplier	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
	Catalog Number(s)	P1455
	CAS#	120-80-9
	RTECS	UX1050000
	TSCA	TSCA 8(b) inventory: Pyrocatechol
	CI#	Not available.
	<u>IN CASE OF EMERGENCY</u> <u>CHEMTREC (24hr) 800-424-9300</u>	
	CALL (310) 516-8000	

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) Pyrocatechol	120-80-9	20			100
Toxicological Data on Ingredients					
Pyrocatechol: ORAL (LD50): Acute: 260 mg/kg [Rat]. 210 mg/kg [Guinea pig]. 260 mg/kg [Mouse]. DERMAL (LD50): Acute: 800 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 inhalation.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Classified A3 (Proven for animal.) by ACGIH, 2B (Possible for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to blood, kidneys. Repeated or prolonged exposure to the substance can produce target organs damage.

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.
Skin Contact	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.
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.
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. Seek medical attention.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	May be combustible at high temperature.
Auto-Ignition Temperature	510°C (950°F)
Flash Points	CLOSED CUP: 127.22°C (261°F). OPEN CUP: 136.67°C (278°F).
Flammable Limits	Not available.
Products of Combustion	These products are carbon oxides (CO, CO ₂).
Fire Hazards in Presence of Various Substances	Slightly flammable to flammable in presence 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	Use appropriate tools to put the spilled solid in a convenient waste disposal container.
Large Spill	Use a shovel to put the material into a convenient waste disposal container. 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 away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. 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.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area. Oxygen Sensitive Sensitive to light. Store in light-resistant containers.

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	TWA: 20 (mg/m ³) from OSHA (PEL) [United States] TWA: 5 (ppm) from OSHA (PEL) [United States] TWA: 20 (mg/m ³) from NIOSH [United States] TWA: 5 (ppm) from NIOSH [United States] TWA: 23 (mg/m ³) [United Kingdom (UK)] TWA: 5 (ppm) [United Kingdom (UK)] TWA: 5 (ppm) from ACGIH (TLV) [United States] Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Crystalline solid.)	Odor	Slight.
Molecular Weight	110.11 g/mole	Taste	Sweet. Bitter.
pH (1% soln/water)	Not available.	Color	Colorless.
Boiling Point	245.5°C (473.9°F)		
Melting Point	105°C (221°F)		
Critical Temperature	Not available.		
Specific Gravity	1.344 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	3.79 (Air = 1)		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	The product is more soluble in oil; log(oil/water) = 0.9		
Ionicity (in Water)	Not available.		

Dispersion Properties See solubility in water, diethyl ether.

Solubility Soluble in cold water, diethyl ether.

Section 10. Stability and Reactivity Data

Stability The product is stable.

Instability Temperature Not available.

Conditions of Instability Excess heat, incompatible materials, light, air/oxygen

Incompatibility with various substances Reactive with oxidizing agents

Corrosivity Non-corrosive in presence of glass

Special Remarks on Reactivity Sensitive to light.
Oxygen sensitive.
Incompatible with Nitric acid.
May discolor on exposure to light or air.

Special Remarks on Corrosivity Not available.

Polymerization Will not occur.

Section 11. Toxicological Information

Routes of Entry Inhalation. Ingestion.

Toxicity to Animals Acute oral toxicity (LD50): 210 mg/kg [Guinea pig].
Acute dermal toxicity (LD50): 800 mg/kg [Rabbit].

Chronic Effects on Humans **CARCINOGENIC EFFECTS:** Classified A3 (Proven for animal.) by ACGIH, 2B (Possible for human.) by IARC.
MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.
May cause damage to the following organs: blood, kidneys.

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

Special Remarks on Toxicity to Animals Lethal Dose Conc/50% Kill:
LD50[Dog] - Route: Oral; Dose: 130 mg/kg

Special Remarks on Chronic Effects on Humans May affect genetic material(mutagenic).
May cause cancer.
May cause adverse reproductive effects based on animal test data.

Special Remarks on other Toxic Effects on Humans Acute Potential Health Effects:
Skin: Causes skin irritation. It can be absorbed through the skin. Harmful if absorbed through the skin. May cause eczematous dermatitis.
Eyes: Causes eye irritation.
Inhalation: Can cause respiratory tract irritation. May cause coughing, burning sensation in throat and lungs.
Ingestion: Harmful if swallowed. May cause nausea, vomiting, headaches, difficulty breathing. May affect the liver and kidneys, behavior/central nervous system (CNS depression, tremors, muscle twitching, dizziness, convulsions), cardiovascular system (rise in blood pressure), blood (blood dyscrasias, leukopenia, anemia). May also interfere with the ability of the blood to carry oxygen (methemoglobinemia) causing headache, dizziness, and a blue color to the skin and lips.


Section 12. Ecological Information

Ecotoxicity	Ecotoxicity in water (LC50): 9.2ppm 96 hours [Fish (Fathead minnow)].
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	: Toxic solid, organic, n.o.s (Pyrocatechol) UNNA: 2811 PG: III
Special Provisions for Transport	Not available.
DOT (Pictograms)	

Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations	Illinois toxic substances disclosure to employee act: Pyrocatechol Illinois chemical safety act: Pyrocatechol New York release reporting list: Pyrocatechol Rhode Island RTK hazardous substances: Pyrocatechol Pennsylvania RTK: Pyrocatechol Minnesota: Pyrocatechol Massachusetts RTK: Pyrocatechol New Jersey: Pyrocatechol New Jersey spill list: Pyrocatechol Louisiana RTK reporting list: Pyrocatechol California Director's List of Hazardous Substances: Pyrocatechol TSCA 8(b) inventory: Pyrocatechol TSCA 4(a) proposed test rules: Pyrocatechol TSCA 8(a) PAIR: Pyrocatechol TSCA 8(d) H and S data reporting: Pyrocatechol: Effective date: 8/4/95; Sunset date: 6/30/98 SARA 313 toxic chemical notification and release reporting: Pyrocatechol CERCLA: Hazardous substances.: Pyrocatechol: 100 lbs. (45.36 kg)
California Proposition 65 Warnings	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. 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.
Other Regulations	

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. 204-427-5).
 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.

Other Classifications

WHMIS (Canada)	CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC). CLASS D-2B: Material causing other toxic effects (TOXIC).	
DSCL (EEC)	R21/22- Harmful in contact with skin and if swallowed. R36/38- Irritating to eyes and skin.	S22- Do not breathe dust. S36/37- Wear suitable protective clothing and gloves.

HMS (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** P4870**References** Not available.**Other Special Considerations** Major Uses: as an antioxidant in rubber, chemical, photographic, dye, fat and oil industries; anti-fungal preservative for treating seed potato pieces

Validated by Sonia Owen on 3/4/2009.

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.