



Material Safety Data Sheet

NFPA



HMIS

Health Hazard	2
Fire Hazard	1
Reactivity	0

Personal Protective Equipment



See Section 15.

Section 1. Chemical Product and Company Identification

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Trade Name	Chloropicrin Test 2	Code	RE2132
Manufacturer	HazTech Systems, Inc. P.O. Box 929 Mariposa, CA 95338	CAS#	108-46-3
Commercial Name(s)	Resorcin	RTECS	VG9625000
Synonym	1,3-Benzenediol; m-dihydroxybenzene	TSCA	TSCA 8(b) inventory. Resorcinol
Chemical Name	Resorcinol	CI#	Not available.
Chemical Family	Not available.	IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300	
Chemical Formula	C6H6O2	CALL (310) 516-8000	
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 ³)	STEL (mg/m ³)	CEIL (mg/m ³)	% by Weight
1) Resorcinol	108-46-3	10	20		100

Toxicological Data on Ingredients	Resorcinol
	ORAL (LD50): Acute: 301 mg/kg [Rat]. 200 mg/kg [Mouse].
	DERMAL (LD50): Acute: 3360 mg/kg [Rabbit].

Section 3. Hazards Identification

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** Classified 4 (No evidence.) by NTP. A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC.
MUTAGENIC EFFECTS Mutagenic for bacteria and/or yeast.
TERATOGENIC EFFECTS Not available.
DEVELOPMENTAL TOXICITY Not available.
 The substance may be toxic to liver, cardiovascular system, endocrine.
 Repeated or prolonged exposure to the substance can produce target organs damage.



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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	607.78°C (1126°F)
Flash Points	CLOSED CUP: 127.22°C (261°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 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	Potentially explosive reaction with nitric acid.

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.

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Section 7. Handling and Storage

Precautions	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. 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. Keep away from incompatibles such as oxidizing agents, acids.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

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: 45 STEL: 90 (mg/m ³) from ACGIH (TLV) [United States] TWA: 10 STEL: 20 (ppm) from ACGIH (TLV) [United States] TWA: 10 STEL: 20 from NIOSH [United States] TWA: 45 STEL: 90 (mg/m ³) from NIOSH [United States] TWA: 10 STEL: 20 (ppm) from OSHA (PEL) [United States] TWA: 45 STEL: 90 (mg/m ³) from OSHA (PEL) [United States] TWA: 10 STEL: 20 (ppm) [United Kingdom (UK)] TWA: 46 STEL: 92 (mg/m ³) [United Kingdom (UK)] Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical state and appearance	Solid. (Crystals solid. Powdered solid.)	Odor	Characteristic. (Slight.)
Molecular Weight	110.11 g/mole	Taste	Sweetish followed by bitter.
pH (1% soln/water)	Not available.	Color	White.
Boiling Point	281°C (537.8°F)		
Melting Point	110°C (230°F)		
Critical Temperature	Not available.		
Specific Gravity	1.272 (Water = 1)		
Vapor Pressure	Not applicable.		
Vapor Density	3.8 (Air = 1)		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	The product is more soluble in oil; log(oil/water) = 0.8		
Ionicity (in Water)	Not available.		
Dispersion Properties	See solubility in water, diethyl ether.		
Solubility	Easily soluble in cold water, diethyl ether.		

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Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Excess heat, incompatible materials
Incompatibility with various substances	Reactive with oxidizing agents, acids.
Corrosivity	Non-corrosive in presence of glass.
Special Remarks on Reactivity	Incompatible with acetanilide, albumin, alkalis, antipyrine, camphor, ferri salts, menthol, spirit nitrous ether, urethane, periodate. When heated to decomposition, it emits acrid smoke and irritating fumes.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Dermal contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 200 mg/kg [Mouse]. Acute dermal toxicity (LD50): 3360 mg/kg [Rabbit].
Chronic Effects on Humans	CARCINOGENIC EFFECTS Classified 4 (No evidence.) by NTP. A4 (Not classifiable for human or animal.) by ACGIH, 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS Mutagenic for bacteria and/or yeast. May cause damage to the following organs: liver, cardiovascular system, 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	May cause cancer based on animal data. No human data found May affect genetic material.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects: Skin: Causes skin irritation. It may be absorbed through the skin and affect metabolism. Eyes: Causes eye irritation. Inhalation: Causes respiratory tract and mucous membrane irritation. Ingestion: May cause gastrointestinal tract irritation. It may affect the blood (methemoglobinemia), respiration (cyanosis, dyspnea), behavior/nervous system(convulsions, excitement, tetany, coma, spastic paralysis), cardiovascular system (hypotension), liver, and kidneys. Chronic Potential Health Effects: Skin: Prolonged or repeated skin contact may cause dermatitis, an allergic skin reaction. Ingestion: Prolonged or repeated ingestion may affect the endocrine system (adrenal gland, thymus), liver, kidneys, and metabolism.

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.

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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.

Identification : Resorcinol UNNA: 2876 PG: III

Special Provisions for Transport Not available.

DOT (Pictograms)

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

Federal and State Regulations

Connecticut hazardous material survey.: Resorcinol
 Illinois toxic substances disclosure to employee act: Resorcinol
 Illinois chemical safety act: Resorcinol
 New York release reporting list: Resorcinol
 Rhode Island RTK hazardous substances: Resorcinol
 Pennsylvania RTK: Resorcinol
 Minnesota: Resorcinol
 Massachusetts RTK: Resorcinol
 Massachusetts spill list: Resorcinol
 New Jersey: Resorcinol
 New Jersey spill list: Resorcinol
 Louisiana spill reporting: Resorcinol
 California Director's List of Hazardous Substances: Resorcinol
 TSCA 8(b) inventory: Resorcinol
 CERCLA: Hazardous substances.: Resorcinol: 5000 lbs. (2268 kg)

California Proposition 65

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.

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)

R22- Harmful if swallowed.	S2- Keep out of the reach of children.
R36/38- Irritating to eyes and skin.	S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
R50- Very toxic to aquatic organisms.	S46- If swallowed, seek medical advice immediately and show this container or label.
	S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

HMIS (U.S.A.)

Health Hazard	2
Fire Hazard	1
Reactivity	0
Personal Protection	E

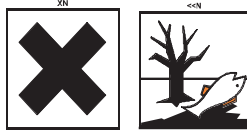
National Fire Protection Association (U.S.A.)

Flammability

	1	
2		0
Health		Reactivity

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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

Catalog Number(s) RE2132

References Not available.

Other Special Considerations Not available.

Validated by R. Turkington

Verified by R. Turkington

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.