RESORCINOL

RSC

CAUTIONARY RESPONSE INFORMATION

Common Synonyms
1,3-Benzenediol
1,3-Dihydroxybenzene
m-Dihydroxybenzene
Dihydroxybenzol
Resorcin

Solid | White or off-white | Faint odor

Sinks and mixes with water.

Keep people away. Avoid contact with solid and dust.
Call fire department.
Notify local health and pollution control agencies.
Protect water intakes.

Fire

Combustible.
CONTAINERS MAY EXPLODE IN FIRE.
Extinguish with dry chemicals, foam, or carbon dioxide.
Water may be ineffective on fire.
Cool exposed containers with water.

Exposure

CALL FOR MEDICAL AID.
DUST
Irritating to eyes, nose and throat.
If inhaled will cause coughing or difficult breathing.
If in eyes, hold eyelids open and flush with plenty of water.
If breathing has stopped, give artificial respiration.
If breathing is difficult, give oxygen.

SOLID
Irritating to skin and eyes.
If swallowed will cause nausea or loss of consciousness.
Remove contaminated clothing and shoes.
Flush affected areas with plenty of water.
IF IN EYES, hold eyelids open and flush with plenty of water.
IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.
IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.

Water Pollution

HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS.
May be dangerous if it enters water intakes.
Notify local health and wildlife officials.
Notify operators of nearby water intakes.

1. CORRECTIVE RESPONSE ACTIONS

Dilute and disperse
Stop discharge

2. CHEMICAL DESIGNATIONS

2.1 CG Compatibility Group: Not listed.
2.2 Formula: 1, 3-$C_6H_4(OH)_2$
2.3 IMO/UN Designation: Not listed
2.4 DOT ID No.: 2876
2.5 CAS Registry No.: 108-46-3
2.6 NAERG Guide No.: 153
2.7 Standard Industrial Trade Classification: 51243

3. HEALTH HAZARDS

3.1 Personal Protective Equipment: U. S. Bu. Mines approved respirator; rubber gloves; safety glasses with side shields or chemical goggles; coveralls or rubber apron
3.2 Symptoms Following Exposure: Inhalation of vapors or dust causes irritation of respiratory tract. Ingestion causes burns of mucous membranes, severe diarrhea, pallor, sweating, weakness, headache, dizziness, tinnitus, shock, and severe convulsions; may also cause siderosis of the spleen and tubular injury to the kidney. Contact with eyes causes irritation. Can be absorbed from wounds or through unbroken skin, producing severe dermatitis, methemoglobinemia, cyanosis, convulsions, tachycardia, dyspnea, and death.
3.3 Treatment of Exposure: INHALATION: remove victim to fresh air; if he is not breathing, give artificial respiration, preferably mouth-to-mouth; if breathing is difficult, give oxygen; call a physician. INGESTION: give activated charcoal; administer gastric lavage with water; consult physician. EYES: flush with water for 15 min. SKIN: flush with water.
3.4 TLV-TWA: 10 ppm
3.5 TLV-STEL: Not listed.
3.6 TLV-Ceiling: 20 ppm.
3.7 Toxicity by Ingestion: Grade 2; LD_{50} = 0.5-5 g/kg
3.8 Toxicity by Inhalation: Currently not available.
3.9 Chronic Toxicity: Produces goiters in rats
3.10 Vapor (Gas) Irritant Characteristics: Currently not available
3.11 Liquid or Solid Characteristics: Currently not available
3.12 Odor Threshold: Currently not available
3.13 IDLH Value: Not listed.
3.14 OSHA PEL-TWA: Not listed.
3.15 OSHA PEL-STEL: Not listed.
3.16 OSHA PEL-Ceiling: Not listed.
3.17 EPA AEGL: Not listed

4. FIRE HAZARDS

4.1 Flash Point: 261°F.
4.2 Flammable Limits in Air: 1.4% at 200°F.
4.3 Fire Extinguishing Agents: Water, foam, dry chemical, carbon dioxide
4.4 Fire Extinguishing Agents Not to Be Used: Water may cause frothing.
4.5 Special Hazards of Combustion Products: Currently not available
4.6 Behavior in Fire: Containers may explode.
4.7 Auto Ignition Temperature: 1,125°F
4.8 Electrical Hazards: Not pertinent
4.9 Burning Rate: Not pertinent
4.10 Adiabatic Flame Temperature: Currently not available
4.11 Stoichometric Air to Fuel Ratio: 30.9 (calc.)
4.12 Flame Temperature: Currently not available
4.13 Combustion Molar Ratio (Reactant to Product): 9.0 (calc.)
4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed

5. CHEMICAL REACTIVITY

5.1 Reactivity with Water: No reaction
5.2 Reactivity with Common Materials: Currently not available
5.3 Stability During Transport: Stable
5.4 Neutralizing Agents for Acids and Caustics: Not pertinent
5.5 Polymerization: Not pertinent
5.6 Inhibitor of Polymerization: Not pertinent

6. WATER POLLUTION

6.1 Aquatic Toxicity: 35 ppm/*/bleak and carp/toxic threshold/fresh water
56.4 ppm/48 hr/daphnia/TL_m/fresh water
*Time period not specified.
6.2 Waterfowl Toxicity: Currently not available
6.3 Biological Oxygen Demand (BOD): 61%, 5 days
6.4 Food Chain Concentration Potential: None
6.5 GESAMP Hazard Profile: Not listed

7. SHIPPING INFORMATION

7.1 Grades of Purity: USP, 99.5+%; Technical, 99%
7.2 Storage Temperature: Ambient
7.3 Inert Atmosphere: No requirement
7.4 Venting: Open
7.5 IMO Pollution Category: Currently not available
7.6 Ship Type: Currently not available
7.7 Barge Hull Type: Currently not available

8. HAZARD CLASSIFICATIONS

8.1 49 CFR Category: Keep Away From Food
8.2 49 CFR Class: 6.1
8.3 49 CFR Package Group: III
8.4 Marine Pollutant: No
8.5 NFPA Hazard Classification:

Category	Classification
Health Hazard (Blue).....	3
Flammability (Red).....	1
Instability (Yellow).....	0

8.6 EPA Reportable Quantity: 5000 pounds
8.7 EPA Pollution Category: D
8.8 RCRA Waste Number: U201
8.9 EPA FWPCA List: Yes

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 Physical State at 15° C and 1 atm: Solid
9.2 Molecular Weight: 110.11
9.3 Boiling Point at 1 atm: (sublimes) 531°F = 277°C = 550°K
9.4 Freezing Point: 228°F = 109°C = 382°K
9.5 Critical Temperature: Not pertinent
9.6 Critical Pressure: Not pertinent
9.7 Specific Gravity: 1.2 at 20°C (solid)
9.8 Liquid Surface Tension: Not pertinent
9.9 Liquid Water Interfacial Tension: Not pertinent
9.10 Vapor (Gas) Specific Gravity: Not pertinent
9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent
9.12 Latent Heat of Vaporization: Not pertinent
9.13 Heat of Combustion: –11,200 Btu/lb = –6,200 cal/g = -259×10^5 J/kg
9.14 Heat of Decomposition: Not pertinent
9.15 Heat of Solution: Not pertinent
9.16 Heat of Polymerization: Not pertinent
9.17 Heat of Fusion: Currently not available
9.18 Limiting Value: Currently not available
9.19 Reid Vapor Pressure: Currently not available

NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	NOT PERTINENT		NOT PERTINENT		NOT PERTINENT		NOT PERTINENT

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
34	52.540	310	0.211	310	0.00281		NOT PERTINENT
36	52.890	320	0.269	320	0.00354		
38	53.230	330	0.342	330	0.00444		
40	53.580	340	0.431	340	0.00553		
42	53.920	350	0.541	350	0.00685		
44	54.270	360	0.675	360	0.00844		
46	54.610	370	0.837	370	0.01035		
48	54.950	380	1.034	380	0.01263		
50	55.300	390	1.270	390	0.01533		
52	55.640	400	1.552	400	0.01852		
54	55.990	410	1.889	410	0.02228		
56	56.330	420	2.288	420	0.02668		
58	56.680	430	2.760	430	0.03182		
60	57.020	440	3.315	440	0.03780		
62	57.370	450	3.966	450	0.04472		
64	57.710	460	4.727	460	0.05272		
66	58.050	470	5.611	470	0.06191		
68	58.400	480	6.638	480	0.07246		
70	58.740	490	7.824	490	0.08451		
72	59.090	500	9.191	500	0.09823		
74	59.430	510	10.760	510	0.11380		
76	59.780	520	12.560	520	0.13150		
78	60.120	530	14.610	530	0.15140		
80	60.470						
82	60.810						
84	61.150						