OXFORD LAB FINE CHEM LLP

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Oxford
Range of
Laboratory Chemicals

MATERIAL SAFETY DATA SHEET

RESORCINOL 99% AR (1,3-Dihydroxy Benzene)
MSDS CAS: - 108-46-3

Section 1: Chemical Product and Company Identification

Section 1: Chemical Product
Product Name: RESORCINOL 99% AR
CAS#: - 108-46-3
C.I. No.: Not available.
Synonym: Resorcin; 1,3-Benzenediol; mdihydroxybenzene
Chemical Name: Resorcinol
Chemical Formula: C6H6O2

Brand: OXFORD

Details Of The Supplier Of The Safety Data Sheet:

Company identification: OXFORD LAB FINE CHEM LLP
Unit. No. 12, 1st Floor, Neminath Industrial Estate No. 6,
Navghar, Vasai (East). Palghar - 401 210.
Mumbai, Maharashtra, INDIA.
Tel: 91-250-2390989
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Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
RESORCINOL	108-46-3	100

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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.

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, CO2).
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 inpresence 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.

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/m3) 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/m3) from NIOSH [United States] TWA: 10 STEL: 20 (ppm) from OSHA (PEL) [United States] TWA: 45 STEL: 90 (mg/m3) from OSHA (PEL) [United States] TWA: 10 STEL: 20 (ppm) [United Kingdom (UK)] TWA: 46 STEL: 92 (mg/m3) [United Kingdom (UK)]3 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.)**
Taste	**: Sweetish followed by bitter.**
Molecular Weight	**: 110.11 g/mole**
Color	**: White.**
pH (1% soln/water)	**: Not available.**
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.**

Section 9: Physical and Chemical Properties (Continued)

Dispersion Properties : See solubility in water, diethyl ether.
Solubility : Easily 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
Incompatibility with various substances: Reactive with oxidizing agents, acids.
Corrosivity: Non-corrosive in presence of glass.
Special Remarks on Reactivity: Incompatible with acetanilide, albumin, alkalies, antipyrine, camphor, ferri salts, menthol, spirit nitrous ether, urethane,periodate. When heated to decompostion, 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 (Notclassifiable 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

Section 11: Toxicological Information (Continued)

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

Toxicity
No data available
Persistence and degradability
No data available
Bioaccumulative potential
No data available
Mobility in soil
No data available(Raffinose pentahydrate)
Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

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

Land transport (ADR-RID)

Proper shipping name : **RESORCINOL**
UN N° : **2876**
H.I. nr : **60**
ADR – Class : **6.1**
Labelling – Transport : **6.1 : Toxic substances.**
ADR – Group : **III**

Sea transport (IMDG) [English only]

Proper shipping name : **RESORCINOL**
UN N° : **2876**
IMO-IMDG - Class or division : **6.1 : Toxic substances.**
IMO-IMDG - Packing group : **III**

Air transport (ICAO-IATA) [English only]

Proper shipping name : **RESORCINOL**
UN N° : **2876**
IATA - Class or division : **6.1 : Toxic substances.**
IATA - Packing group : **III**

Section 15: Other Regulatory Information

Federal and State Regulations:

Connecticut hazardous material survey.: Resorcinol Illinois toxic substances disclosure to employee act: Resorcinol Illinoischemical 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)

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.

Section 15: Other Regulatory Information (Continued)

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. R36/38- Irritating to eyes and skin. R50- Very toxic to aquatic organisms. S2- Keep out of thereach of children. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S46- Ifswallowed, 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.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

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 - Additional Information

References: Not available.

Other Special Considerations: Not available.

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