

MATERIAL SAFETY DATA SHEET

Product Name: Resorcinol

CAS No.: 108-46-3

Version: 0

1. Identification

Product Code : 90525
Company Name : Advent Chembio Private Limited
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2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
RESORCINOL	108-45-3	90-100%

3. Hazards Identification**Hazard classification****Health hazards**

Acute toxicity (Oral) : Category 4
Skin corrosion/irritation : Category 2
Serious eye damage/eye irritation : Category 2

Environmental hazards

Acute hazards to the aquatic environment : Category 1

Labels elements**Hazard symbol**

Signal word : Warning
Hazard statement : Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.
Very toxic to aquatic life.

Precautionary statement**Prevention**

: Do not eat, drink or smoke when using this product. Wear protective gloves/eye protection/face protection. Wash hands thoroughly after handling. Avoid release to the environment.

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- Response** : IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.
- Storage** : Store in a well-ventilated place. Keep container tightly closed. Store locked up.
- Disposal** : Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Other hazards which do not result in GHS classification** : None.

4. First Aid Measures

- General information** : Get medical advice/attention if you feel unwell. If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance.
- Ingestion** : Rinse mouth. Get medical attention if symptoms occur.
- Inhalation** : Move to fresh air. Get medical attention if symptoms persist.
- Skin contact** : Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing.
- Eye contact** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if symptoms persist.
- Most important symptoms/effects, acute and delayed** : Harmful if swallowed. May cause skin and eye irritation.
- Indication of immediate medical attention and special treatment needed** : Treat symptomatically. Symptoms may be delayed.

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5. Fire fighting measures

- General fire hazards** : In case of fire and/or explosion do not breathe fumes.
- Suitable (and unsuitable) extinguishing media**
- Suitable extinguishing media** : Water spray, fog, CO₂, dry chemical or alcohol resistant foam.
- Unsuitable extinguishing media** : None known.
- Specific hazards arising from the chemical** : Fire may produce irritating, corrosive and/or toxic gases.
- Special protective equipment and precautions for firefighters**
- Special fire fighting procedures** : Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.
- Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental Release Measures

- Personal precautions, protective equipment and emergency procedures** : Keep unauthorized personnel away. Use personal protective equipment. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
- Methods and material for containment and cleaning up** : Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.
- Notification Procedures** : Inform authorities if large amounts are involved. Prevent entry into waterways, sewer, basements or confined areas.
- Environmental precautions** : Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

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7. Handling and Storage

- Precautions for safe handling** : Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Do not taste or swallow. Do not eat, drink or smoke when using the product. Use only with adequate ventilation. Wash thoroughly after handling.
- Conditions for safe storage, including any incompatibilities** : Keep container tightly closed. Store in a well-ventilated place.

8. Exposure Controls Personal Protection

Control parameters Occupational exposure limits

Chemical identity	Type	Exposure Limit values	Source
RESORCINOL	TWA	10 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	20 ppm	US. ACGIH Threshold Limit Values (2011)
	STEL	0.1 ppm 1 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	REL	10 ppm 45 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	TWA	10 ppm 45 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	0.1 ppm 1 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate engineering controls : No data available.

Individual protection measures, such as personal protective equipment

- General information** : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.
- Eye/face protection** : Use tight fitting goggles if dust is generated.
- Hand protection** : Use suitable protective gloves if risk of skin contact.
- Other** : Wear suitable protective clothing .
- Respiratory protection** : If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable

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Hygiene measures : level (in countries where exposure limits have not been established), an approved respirator must be worn. Air-purifying respirator with a high efficiency particulate filter.

: Provide eyewash station and safety shower. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and Chemical Properties

Appearance : White Crystals or powder Solid
Odor : Faint characteristic odor
pH : 5.2
Melting point/freezing point : 110 °C
Initial boiling point and boiling range : 280 °C
Flash Point : 127 °C
Vapor pressure : 0.13 kPa (25 °C)
Vapor density : 3.79 AIR=1
Relative density : 1.27 (20 °C)
Solubility in water : Completely Soluble
Solubility (other) : No data available.
Formula : C₆H₆O₂
Molecular Weight : 110.11 g/mol

10. Stability and Reactivity

Reactivity : No dangerous reaction known under conditions of normal use.
Chemical stability : Material is stable under normal conditions.
Possibility of hazardous reactions : Hazardous polymerization does not occur.
Conditions to avoid : Keep away from sources of ignition - No smoking. Heat. Contact with incompatible materials.
Incompatible materials : Oxidizing agents. Alkalies. Ferric salts. Albumin.
Hazardous decomposition products : Thermal decomposition may release oxides of carbon.

11. Toxicological Information**Information on likely routes of exposure**

Ingestion : Harmful if swallowed.
Inhalation : May cause irritation to the respiratory system.
Skin contact : May be harmful in contact with skin. Causes skin irritation.
Eye contact : Causes serious eye irritation.

Information on toxicological effects

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- Oral Product** : LD 50 (Rat): 301 mg/kg
LD (Rabbit): +/- 750 mg/kg
LD (Rat): +/- 370 mg/kg
LD (Guinea pig): +/- 370 mg/kg
- Dermal Product** : LD 50 (Rabbit): 3,360 mg/kg
- Inhalation Product** : No data available.
Repeated dose toxicity Product : No data available.
Skin corrosion/irritation Product : Causes skin irritation.
- Serious eye damage/eye irritation Product** : Causes serious eye irritation.
Respiratory or skin sensitization Product : Not a skin sensitizer.
- Carcinogenicity Product** : This substance has no evidence of carcinogenic properties.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans DIOXANE : No carcinogenic components identified
US. National Toxicology Program (NTP) Report on Carcinogens DIOXANE : No carcinogenic components identified
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050 : No carcinogenic components identified
- Germ cell mutagenicity**
In vitro Product : No mutagenic components identified
In vivo Product : No mutagenic components identified
Reproductive toxicity Product : No components toxic to reproduction
- Specific target organ toxicity - single exposure Product** : None known.
Specific target organ toxicity - repeated exposure Product : None known.
Aspiration hazard Product : Not classified.
Other effects : None known.

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12. Ecological Information**Ecotoxicity****Acute hazards to the aquatic environment :**

- Fish Product** : No data available.
Specified substance(s): : LC 50 (Zebra danio (Danio rerio), 7 d): 190 - 361 mg/l Mortality
RESORCINOL : LC 50 (Rainbow trout, donaldson trout (Oncorhynchus mykiss), 60 d): 100 - 1,000 mg/l Mortality
LC 50 (Fathead minnow (Pimephales promelas), 96 h): 36 - 100 mg/l Mortality
- Aquatic invertebrates Product** : No data available.
Specified substance(s): : LC 50 (Water flea (Daphnia magna), 96 h): 0.25 mg/l Mortality
RESORCINOL : LC 50 (Daggerblade grass shrimp (Palaemonetes pugio), 96 h): 30.9 - 60.6 mg/l Mortality
LC 50 (Oligochaete, worm (Lumbriculus variegatus), 96 h): > 100 mg/l Mortality

Chronic hazards to the aquatic environment :

- Fish Product** : No data available.
Aquatic invertebrates Product : No data available.
Toxicity to Aquatic Plants Product: : No data available.
Persistence and degradability
- Biodegradation Product** : There are no data on the degradability of this product.
BOD/COD ratio Product : No data available.
Bioaccumulative potential
- Bioconcentration factor (BCF) Product** : No data available on bioaccumulation.
Partition coefficient n-octanol / water (log Kow) Product : Log Kow: 0.80
Mobility in soil : The product is water soluble and may spread in water systems
- Other adverse effects** : Very toxic to aquatic organisms.

13. Disposal consideration

- Disposal instructions** : Discharge, treatment, or disposal may be subject to national, state, or local laws. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
- Contaminated packaging** : Since emptied containers retain product residue, follow label warnings even after container is emptied.

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14. Transport Information

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
DOT	UN 2876	Resorcinol	6.1	III	No
IMDG	UN 2876	Resorcinol	6.1	III	No
IATA	UN 2876	Resorcinol	6.1	III	No

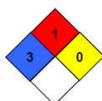
15. Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture
No Data Available.

16. Other Information

NFPA Hazard ID



■ Flammability
■ Health
■ Reactivity
■ Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

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