

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Resorcinol
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CAS number 108-46-3

Synonyms 1,3-Benzenediol

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses General industrial use.

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute Oral Toxicity	Category 4
Skin Irritation	Category 2
Serious Eye Damage	Category 1
Skin Sensitization	Category 1B
Specific Target Organ Toxicity (single exposure)	Category 1
Target Organ(s) - Central nervous system, Blood	

Specific Target Organ Toxicity (single exposure) Target Organ(s) - Respiratory system Acute Aquatic Hazard Chronic Aquatic Hazard Category 2

Category 1 Category 3

2.2 GHS Label elements, including precautionary statements

Pictogram



- Signal Word Danger
- Hazard statements Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. Causes damage to organs (Central nervous system, Blood) if swallowed. May cause damage to organs (Respiratory system) if swallowed. Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Precautionary statements Prevention: Do not breathe dust. Wash skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/ eye protection/ face protection.

Response: IF exposed or concerned, call a POISON CENTER/ doctor.

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. Rinse mouth.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/ attention. Take off contaminated clothing and wash before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

Spills: Collect spillage.

Storage: Store locked up.

Disposal: Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Resorcinol	1,3-Benzenediol	108-46-3	>99%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

- If inhaled Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Apply artificial respiration if victim is not breathing. Rinse nose, mouth and throat with water. Keep victim warm with a blanket etc. Get immediate medical advice/attention. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.
- **In case of skin contact** Gently wash with plenty of soap and water. Remove/Take off immediately contaminated clothing and shoes. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
- **In case of eye contact** Do not rub eye. Hold eyelids apart. Begin to rinse with water as soon as possible and rinse cautiously for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
- If swallowed Rinse mouth. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Keep victim warm with a blanket etc. Get immediate medical advice/attention. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Administer oxygen if breathing is difficult. Apply artificial respiration if victim is not breathing.
- **4.2 Most important symptoms and effects, both acute and delayed** The most important known symptoms and effects are described in the labelling (see Section 2.2) and/or in Section 11.
- **4.3 Indication of any immediate medical attention and special treatment needed** No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	Fog, water, dry chemical powder, alcohol-resistant
	foam, Carbon dioxide.

Unsuitable extinguishing media Straight streams.

5.2 Specific hazards arising from the substance or mixture

A cloud of uncombusted dust of this product formed in an explosion or fire may cause a secondary explosion. Cool cylinders/containers with an appropriate cooling means, paying heed to incompatible hazardous substances. Harmful substances in the water runoff from fire control may have adverse environmental and biological effects.

5.3 Special protective equipment and precautions for firefighters

Wear regional, national, and local standards approved fire fighting turnout gear and positive pressure self-contained breathing apparatus (SCBA). Wear flame-resistant or fireproof clothes, with face shield, helmet, and gloves.

5.4 Further information

Flash Poin	t		167 °C Pensky-Martens Closed Cup		
Autoignitic	on Temperat	ure	608 °C		
Explosion	limits				
	Upper No data available.				
	Lower No data available.				
	Sensitivity to Mechanical Impact No information available			No information available.	
	Sensitivity	Sensitivity to Static Discharge No information available.		No information available.	
	NFPA				
	Health	Flammability	Instability	Physical hazards	
	2	1	0	N/A	

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective equipment to avoid contact of dust with the eyes and skin and inhalation of dust. If fire does not break out, wear highly sealable non-permeable protective clothing. Spray water to prevent scattering, if appropriate. Evacuate area. Evacuate people who are downwind, and keep upwind while working. Keep unauthorized personnel away. If the surrounding area may be affected (including health impairment), warn the nearby residents. Remove immediately all ignition sources nearby. Form large safety zone. ELIMINATE all ignition sources such as heat/sparks/open flames/hot surfaces/static discharges. Prepare appropriate extinguishing agent. Cover powder spill with plastic sheet or tarp to minimize spreading and to keep powder dry.

6.2 Environmental precautions

Avoid release to the environment. Form a dike to prevent the leakage from flowing into waterways (rivers, sewers, etc.) and affecting the environment.

6.3 Methods and materials for containment and cleaning up

Collect the leakage promptly. Wet the spills, if appropriate, to prevent scattering. Dike the leakage promptly to prevent scattering into waters (river, sewer, and so on), then wet with water and collect later disposal. Sweep and collect the leakage in a sealed container and move it to a safe place. Use explosion-proof electrical/ventilating/lighting equipment. ELIMINATE all ignition sources such as heat/sparks/open flames/hot surfaces/static discharges. Consult with an expert when collecting the leakage. Use dust explosion-proof type electric equipment and lighting. Electrically conductive containers must be grounded. Collect fine substance by dust explosion-proof cleaner to prevent scatter. Collect leakage after taking measures for safe handling. Collect the residue carefully and transfer it to a safe place.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling

Prevent dust cloud or/and dust accumulation. Keep away from incompatible materials. Ventilate by a system of local and/or general exhaust. ELIMINATE all ignition sources. Do not use low conductive material to equipments and containers including plastic lining, bags, and filters. Use dust explosion-proof electrical/ventilating/lighting/equipment. Inerting by nitrogen gas, etc., and explosion pressure venting of confined spaces are recommended as dust explosion precautions. Handle the product in closed system or use dust collector, to prevent exposure in a dusty atmosphere. Do not eat, drink, or smoke when using this product. Avoid all exposure to personnel. Do not bring contaminated protective equipment into the rest area. Wear appropriate protective equipment to avoid contact with work clothes, skin, mucous membrane, or eyes. Contaminated work clothing should not be allowed out of the workplace. Dispose of contaminated protective clothing safely. Take precautionary measures against static electricity such as grounding and bonding, wearing anti-static footwear and clothing, using grounded conductive floor.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep in a fire-proof designed place. Store under controlled lighting and appropriate ventilation. Take precautionary measures against static discharges. Store locked up. Protect from sunlight. Store in a well-ventilated place. Store in an area without drain or sewer access. Light-shielding storage.

Incompatibilities

Strong oxidizers, strong acids, amino compounds, alkalies.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Туре	Va	lue
Resorcinol	TWA	10 ppm	45 mg/m3
I COOLCHIOL	STEL	20 ppm	90 mg/m3

US. ACGIH Threshold Limit Values

Component	Туре	Value
Resorcinol	TWA	10 ppm
I COOLCHIOL	STEL	20 ppm

US. NIOSH: Pocket Guide to Chemical Hazards

Component	Туре	Va	lue
Resorcinol	TWA	10 ppm	45 mg/m3
I CESCI CITIOI	STEL	20 ppm	90 mg/m3

ACGIH Biological Exposure Indices

Component	Value	Parameters	Specimen
Resorcinol	5% Hb	Methemoglobin	Blood

8.2 Exposure controls

Appropriate engineering controls

Use in a closed equipment or apparatus. Use a local and/or general ventilation system with collecting apparatus to prevent exposure of worker in dust generating job (polishing, grinding, cutting, and so on). Use a local and/or general ventilation system with collecting apparatus, and a closed equipment or apparatus. Provide facilities to wash hands, eyes, and the body at the working place.

Personal protective equipment

Eye/face protection

Be sure to use eye protective equipment only chosen according to specific regulatory requirements after a risk assessment. Chemical safety goggles.

Skin protection

Be sure to use hand protective equipment only chosen according to specific regulatory requirements after a risk assessment. Impervious gloves.

Body Protection

Be sure to use personal protective equipment (PPE) only chosen according to specific regulatory requirements after a risk assessment. Protective clothing (work clothing covering the entire skin, nonwoven fabric is recommended).

Respiratory protection

Be sure to use breathing protective equipment only chosen according to specific regulatory requirements after a risk assessment. When an emergency or leak occurs, wear air respirator or positive pressure self-contained breathing apparatus (SCBA). Filter respirator for dust.

Control of environmental exposure

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Solid
Appearance	White to pale yellow
Odor	Slight phenolic odor
Odor Threshold	No data available
рН	4.6
Melting Point/Range	109 - 111 °C
Boiling Point/Range	281 °C (1013.0 hPa)
Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	0.001 kPa (20 °C)
Vapor Density	No data available
Density	1.285 (15 °C)
Solubility	1.1 g/mL soluble (20 °C)
Partition coefficient; n-octanol/water	log Pow: 0.8
Autoignition Temp	608 °C
Decomposition Temp	> 350 °C
Viscosity	No data available
Molecular Formula	C6 H6 O2
Molecular Weight	110.11 g/mol
VOC Content(%)	No data available
Oxidizing properties	No data available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

Material is stable under normal conditions.

10.3 Possibility of hazardous reactions

May form explosive dust cloud. Fine particles generated from the product may cause a dust explosion. May cause a fire and/or explosion, or react violently, in the conditions listed below or in contact with incompatible materials.

10.4 Conditions to avoid

Incompatible materials, open flame, mechanical spark, electrical spark, heat, hot surface(s), electrostatic discharge.

10.5 Incompatible materials

Strong oxidizers, strong acids, amino compounds, alkalies.

10.6 Hazardous decomposition products

Carbon monoxide, Carbon dioxide, Hydrocarbons, soot.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Resorcinol	510 mg/kg (Rat)	2,830 mg/kg (Rabbit)	> 2,800 mg/m3 (Rat) 8h

Skin corrosion/irritation

Irritating to skin.

Serious eye damage/eye irritation

Severe irritant to eyes.

Respiratory or skin sensitization

Skin sensitizer.

Germ cell mutagenicity

No information available.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Resorcinol	108-46-3	Not listed				

Specific target organ toxicity - single exposure

Central nervous system, Blood, Respiratory system.

Specific target organ toxicity - repeated exposure

No specific target organs noted.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1 Toxicity

Product		Species	Test Results
Resorcinol	LC50	Fathead Minnow	26.8 mg/l, 96 hrs
	EC50	Water Flea	1 mg/l, 48 hrs
	EC50	Green Algae	> 97 mg/l, 72 hrs
	NOECr	Green Algae	97 mg/l, 72 hrs
	LOEC	Rainbow Trout	32 mg/l, 60 d
	NOEC	Water Flea	>/= 172 µg/l, 21 d

12.2 Persistence and degradability

Rapid biodegradability.

12.3 Bio accumulative potential

Bioconcentration factor (BCF): 3.16.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US) UN-no Proper Shipping Name Hazard Class Packing Group	UN2876 RESORCINOL 6.1 III
IMDG UN-no Proper Shipping Name Hazard Class Packing Group	UN2876 RESORCINOL 6.1 III
IATA UN-no Proper Shipping Name Hazard Class Packing Group	UN2876 RESORCINOL 6.1 III

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed, Resorcinol (CAS #108-46-3), RQ: 5000 lb.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Acute Health Hazard.

SARA 313 (TRI reporting) Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) Not regulated.

Clean Water Act (CWA) Listed, Resorcinol (CAS #108-46-3).

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Listed, Resorcinol (CAS #108-46-3).

US. New Jersey Worker and Community Right-to-Know Act Listed, Resorcinol (CAS #108-46-3).

US. Pennsylvania Worker and Community Right-to-Know Law Listed, Resorcinol (CAS #108-46-3).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 01/18/2016 Revision 1: 11/14/2024

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.