

MSDS**Material Safety Data Sheet**

From: Mallinckrodt Baker, Inc.
222 Red School Lane
Phillipsburg, NJ 08865



Mallinckrodt
CHEMICALS



24 Hour Emergency Telephone: 908-859-2151
CHEMTREC: 1-800-424-9300

National Response in Canada
CANUTEC: 613-996-6666

Outside U.S. and Canada
Chemtrec: 703-527-3887

NOTE: CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.

RESORCINOL

MSDS Number: R3900 --- *Effective Date: 04/04/00*

1. Product Identification

Synonyms: Resorcin; 1-3 Dihydroxybenzene; m-Benzenediol; 1,3-Benzenediol

CAS No.: 108-46-3

Molecular Weight: 110.11

Chemical Formula: C₆H₆O₂

Product Codes:

J.T. Baker: 3360, 3366, 3368

Mallinckrodt: 7232

2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
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Resorcinol	108-46-3	90 - 100%	Yes

3. Hazards Identification

Emergency Overview

DANGER! MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. MAY CAUSE METHEMOGLOBINEMIA. AFFECTS CARDIOVASCULAR SYSTEM, CENTRAL NERVOUS SYSTEM, BLOOD, SPLEEN, LIVER AND KIDNEYS. CAUSES SEVERE IRRITATION TO SKIN AND EYES. CAUSES IRRITATION TO RESPIRATORY TRACT. MAY CAUSE ALLERGIC SKIN REACTION.

J.T. Baker SAF-T-DATA^(tm) Ratings (Provided here for your convenience)

Health Rating: 2 - Moderate

Flammability Rating: 1 - Slight

Reactivity Rating: 1 - Slight

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

Storage Color Code: Orange (General Storage)

Potential Health Effects

Inhalation:

Inhalation of dust causes irritation to respiratory tract. Toxic effects may follow and include methemoglobinemia, convulsions, and death.

Ingestion:

Toxic! A poison to blood and nerves. Causes gastrointestinal upset with severe diarrhea, sweating, weakness, headache, dizziness, cyanosis, spleen damage, kidney damage, cardiovascular effects, liver damage, and possibly convulsions and death.

Skin Contact:

Strong irritant to skin, causing severe dermatitis and loss of superficial layers of skin. Can be absorbed through skin with severe exposures producing symptoms paralleling ingestion and enlargement of local lymph glands. May cause allergic skin reactions.

Eye Contact:

Strong irritant. Can cause permanent damage.

Chronic Exposure:

Target organs include liver and kidneys.

Aggravation of Pre-existing Conditions:

Persons with pre-existing disorders of the blood, skin, liver, kidneys or lungs may be at an increased risk from exposure.

4. First Aid Measures

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion:

If swallowed, give large quantities of water to drink and get medical attention immediately. Never give anything by mouth to an unconscious person.

Skin Contact:

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5. Fire Fighting Measures

Fire:

Flash point: 127C (261F) CC

Autoignition temperature: 608C (1126F)

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

Explosion:

Not considered to be an explosion hazard.

Fire Extinguishing Media:

Water spray, dry chemical, alcohol foam, or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Sealed containers may rupture when heated.

6. Accidental Release Measures

Remove all sources of ignition. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Clean up spills in a manner that does not disperse dust into the air. Use non-sparking tools and equipment. Reduce airborne dust and prevent scattering by moistening with water. Pick up spill for recovery or disposal and place in a closed container. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

7. Handling and Storage

Keep in a tightly closed container. Store in a cool, dry, ventilated area away from sources of heat or ignition. Protect against physical damage. Store separately from reactive or combustible materials, and out of direct sunlight. Isolate from incompatible substances. Control ignition sources. Employ grounding, bonding, venting and explosion relief provisions in accord with accepted engineering practices in any process capable of generating an explosion due to static discharge. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

-ACGIH Threshold Limit Value (TLV):

10 ppm (TWA), 20 ppm (STEL)

Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved):

If the exposure limit is exceeded, a full facepiece respirator with dust/mist filter may be worn up to 50 times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lowest. For emergencies or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. **WARNING:** Air purifying respirators do not protect workers in oxygen-deficient atmospheres. If heat is involved, an organic vapor/dust mist cartridge may be necessary.

Skin Protection:

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection:

Use chemical safety goggles and/or full face shield where dusting or splashing of solutions is possible. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:

White powder or crystals. May have pinkish cast.

Odor:

Slight characteristic odor.

Solubility:

Completely soluble in water.

Specific Gravity:

1.27

pH:

5.2

% Volatiles by volume @ 21C (70F):

No information found.

Boiling Point:

280C (536F)

Melting Point:

110C (230F)

Vapor Density (Air=1):

3.8

Vapor Pressure (mm Hg):

1 @ 42C (108F)

Evaporation Rate (BuAc=1):

No information found.

10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage. Discolors on exposure to air and light (turns pink).

Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Oxidizers, alkalis, ferric salts, acetanilide, albumin, alkalis, antipyrine, ferric salts, camphor, menthol, spirit nitrous ether, and urethane.

Conditions to Avoid:

Heat, flames, ignition sources and incompatibles.

11. Toxicological Information

Investigated as a tumorigen and mutagen. Eye rabbit, standard Draize: 100 mg severe; oral rat LD50: 301 mg/kg; skin rabbit LD50: 3360 mg/kg.

-----\Cancer Lists\-----

Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Resorcinol (108-46-3)	No	No	3

12. Ecological Information

Environmental Fate:

When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material may leach into groundwater. When released into water, this material is expected to readily biodegrade. This material has an estimated bioconcentration factor (BCF) of less than 100. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life of less than 1 day.

Environmental Toxicity:

This material is expected to be slightly toxic to aquatic life. The LC50/96-hour values for fish are between 10 and 100 mg/l.

13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Domestic (Land, D.O.T.)

Proper Shipping Name: RESORCINOL

Hazard Class: 6.1

UN/NA: UN2876

Packing Group: III

Information reported for product/size: 12KG

International (Water, I.M.O.)

Proper Shipping Name: RESORCINOL

Hazard Class: 6.1

UN/NA: UN2876

Packing Group: III

Information reported for product/size: 12KG

15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia

RESORCINOL

-----\Chemical Inventory Status - Part 2\-----				
Resorcinol (108-46-3)	Yes	Yes	Yes	Yes
-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	--Canada--			
	Korea	DSL	NDSL	Phil.
Resorcinol (108-46-3)	Yes	Yes	No	Yes
-----\Federal, State & International Regulations - Part 2\-----				
Ingredient	-SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Catg.
Resorcinol (108-46-3)	No	No	No	No
-----\Federal, State & International Regulations - Part 2\-----				
Ingredient	-RCRA-		-TSCA-	
	CERCLA		261.33	
			8(d)	
Resorcinol (108-46-3)	5000		U201	
			No	

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No
SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No
Reactivity: No (Pure / Solid)

Australian Hazchem Code: 2X

Poison Schedule: No information found.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

16. Other Information

NFPA Ratings: Health: **3** Flammability: **1** Reactivity: **0**

Label Hazard Warning:

DANGER! MAY BE FATAL IF SWALLOWED. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. MAY CAUSE METHEMOGLOBINEMIA. AFFECTS CARDIOVASCULAR SYSTEM, CENTRAL NERVOUS SYSTEM, BLOOD, SPLEEN, LIVER AND KIDNEYS. CAUSES SEVERE IRRITATION TO SKIN AND EYES. CAUSES IRRITATION TO RESPIRATORY TRACT. MAY CAUSE ALLERGIC SKIN REACTION.

Label Precautions:

Do not get in eyes.
Do not breathe dust.
Keep container closed.
Use only with adequate ventilation.
Wash thoroughly after handling.

Label First Aid:

If swallowed, give large amounts of water to drink. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases get medical attention immediately.

Product Use:

Laboratory Reagent.

Revision Information:

MSDS Section(s) changed since last revision of document include: 3, 15, 16.

Disclaimer:

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