

Common Name: **1,2-DIHYDROXYBENZENE**

Synonyms: Catechol; o-Dihydroxybenzene; Pyrocatechol

CAS No: 120-80-9

 Molecular Formula: C₆H₆O₂

RTK Substance No: 0722

 Description: Colorless, crystalline solid, with a slight *Phenolic* odor, that becomes a vapor at ordinary temperatures

HAZARD DATA

Hazard Rating	Firefighting	Reactivity
3 - Health 1 - Fire 0 - Reactivity DOT#: UN 2811 ERG Guide #: 154 Hazard Class: 6.1 (Poison)	COMBUSTIBLE SOLID Use dry chemical, CO ₂ , water spray or alcohol-resistant foam as extinguishing agents. POISONOUS GASES ARE PRODUCED IN FIRE. Use water spray to keep fire-exposed containers cool. Flow or agitation may generate electrostatic charge.	1,2-Dihydroxybenzene reacts violently with NITRIC ACID. 1,2-Dihydroxybenzene is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE); ACID CHLORIDES; ACID ANHYDRIDES; and STRONG BASES (such as SODIUM HYDROXIDE and POTASSIUM HYDROXIDE).

SPILL/LEAKS

Isolation Distance:

Small Spills: 30 meters (100 feet)

Large Spills: 100 meters (300 feet)

Fire: 800 meters (1/2 mile)

Moisten spilled material first or use a HEPA-filter vacuum for clean-up and place into sealed containers for disposal.

DO NOT wash into sewer.

1,2-Dihydroxybenzene is moderately to highly toxic to aquatic organisms.

PHYSICAL PROPERTIES

Odor Threshold: *Phenolic* odor

Flash Point: 260°F (127°C)

Auto Ignition Temp: 950°F (510°C)

Vapor Density: 3.8 (air = 1)

Vapor Pressure: 5 mm Hg at 219°F (104°C)

Specific Gravity: 1.34 (water = 1)

Water Solubility: Slightly soluble

Boiling Point: 473°F (245°C)

Melting Point: 221°F (105°C)

Ionization Potential: 8.15 +/- 1.0 eV

Molecular Weight: 110

EXPOSURE LIMITS

NIOSH: 5 ppm, 10-hr TWA

ACGIH: 5 ppm, 8-hr TWA

The Protective Action Criteria values are:

PAC-1 = 5 ppm

PAC-2 = 7.5 ppm

PAC-3 = 20 ppm

PROTECTIVE EQUIPMENT

Gloves: Butyl and Viton (>8-hr breakthrough for *aromatic Phenols*)

Coveralls: Tychem® BR, LV, Responder® and TK (>8-hr breakthrough for *aromatic Phenols*)

Respirator: >5 ppm -Supplied air or SCBA

HEALTH EFFECTS

Eyes: Irritation and burns

Skin: Irritation and burns

Inhalation: Nose and throat irritation with coughing and wheezing

Dizziness, nausea, vomiting and convulsions

Methemoglobinemia with headache, fatigue and blue color to the skin and lips

Chronic: Cancer (stomach) in animals

FIRST AID AND DECONTAMINATION

Remove the person from exposure.

Flush eyes with large amounts of water for at least 30 minutes. Remove contact lenses if worn. Seek medical attention.

Quickly remove contaminated clothing and wash contaminated skin with large amounts of water.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer promptly to a medical facility.