Section 1  Product Description

Product Name: Catechol
Recommended Use: Science education applications
Synonyms: Phenolic
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150

Chemical Information:
800-227-1150 (8am-5pm (ET) M-F)
Chemtrec:
800-424-9300 (Transportation Spill Response 24 hours)

Section 2  Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

DANGER

Toxic if swallowed. Harmful in contact with skin. Causes skin irritation. Causes serious eye irritation. Suspected of causing cancer. Toxic to aquatic life.

GHS Classification:
Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2, Carcinogenicity Category 2, Hazardous to the aquatic environment - Acute Category 2, Acute Toxicity - Oral Category 3, Acute Toxicity - Dermal Category 4

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention.

Section 3  Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS #</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catechol (120-80-9) 99%</td>
<td>120-80-9</td>
<td>100</td>
</tr>
</tbody>
</table>

Section 4  First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: 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.
Skin Contact: IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Ingestion: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Section 5  Firefighting Procedures

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Fire and/or Explosion Hazards: N/A

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

Section 6  Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Clean up spills immediately using Protective Equipment recommended in Section 8 at a minimum. Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away. Avoid the generation of dusts during clean-up. Avoid breathing dust/fume/gas/mist/vapors/spray. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Avoid runoff into storm sewers and ditches that lead to waterways. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container.

Section 7  Handling and Storage

Handling: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Keep container tightly closed in a cool, well-ventilated place.

Storage: Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage Code: Blue - Toxic. Store separately in a secured area.

Section 8  Protection Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH (TWA)</th>
<th>OSHA PEL (STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catechol (120-80-9) 99%</td>
<td>5 ppm TWA</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Control Parameters

Engineering Measures: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure. General room or local exhaust ventilation is usually required to meet employee exposure standards and/or to ensure employees are not overexposed to airborne material as described in Section III.

Personal Protective Equipment (PPE):

Respiratory Protection: No respiratory protection required under normal conditions of use. If an exposure limit is exceeded or if an operator is experiencing symptoms of inhalation overexposure as explained in Section III, provide respiratory protection.

Respirator Type(s): NIOSH approved air purifying respirator with dust/mist filter.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Where use can result in skin contact, practice good personal hygiene. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly.

Gloves: Nitrile

Section 9  Physical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>C6H6O2</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>110.11</td>
</tr>
<tr>
<td>Appearance</td>
<td>Off-white to tan Solid</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>0.1 hPa at 35 °C</td>
</tr>
<tr>
<td>Evaporation Rate (BuAc=1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density (Air=1)</td>
<td>3.79</td>
</tr>
</tbody>
</table>
Safety Data Sheet
Catechol

Odor: No data available
Odor Threshold: No data available
pH: 6.0
Melting Point: No data available 105°C
Boiling Point: 245°C
Flash Point: No data available 127°C
Flammable Limits in Air: LEL: 1.4% UEL: N/A

Specific Gravity: 1.344
Solubility in Water: Soluble
Log Pow (calculated): 0.88
Autoignition Temperature: 510°C
Decomposition Temperature: No data available
Viscosity: No data available
Percent Volatile by Volume: N/A

Section 10  Reactivity Data

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Conditions to Avoid: None known.
Incompatible Materials: Oxidizing materials
Hazardous Polymerization: Will not occur

Section 11  Toxicity Data

Routes of Entry: Inhalation, Ingestion, and Skin contact.
Symptoms (Acute): N/A
Delayed Effects: No data available

Acute Toxicity:
Chemical Name: Catechol (120-80-9) 99%
CAS Number: 120-80-9
Oral LD50: MAMMAL 240 mg/kg
Oral LD50: Rat 3890 mg/kg
Dermal LD50: Not determined
Inhalation LC50: Not determined

Carcinogenicity:
Chemical Name: Catechol (120-80-9) 99%
CAS Number: 120-80-9
IARC: Listed
NTP: Not listed
OSHA: Listed

Chronic Effects:
Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: See Section 2
Chronic: Certain components or species of this product are considered potential carcinogens., Reproductive data cited., Tumorigenic data cited., Mutation data cited.

Section 12  Ecological Data

Overview: Moderate ecological hazard. This product may be dangerous to plants and/or wildlife. Highly/very toxic to fish and other water organisms.
Mobility: No data
Persistence: No data
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name: Catechol (120-80-9) 99%
CAS Number: 120-80-9
Eco Toxicity: 48 HR EC50 DAPHNIA MAGNA 1.66 MG/L
6 HR EC50 CHLORELLA VULGARIS 50 - 135 MG/L

Section 13  Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined
Section 14
Transport Information

Ground - DOT Proper Shipping Name: UN2811, Toxic solids, organic, n.o.s (catechol), 6.1, III

Air - IATA Proper Shipping Name: UN number: 2811 Class: 6.1 Packing group: III Proper shipping name: Toxic solid, organic, n.o.s. (Pyrocatecho)

Section 15
Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>§ 313 Name</th>
<th>§ 304 RQ</th>
<th>CERCLA RQ</th>
<th>§ 302 TPQ</th>
<th>CAA 112(2) TQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catechol (120-80-9) 99%</td>
<td>120-80-9</td>
<td>Catechol</td>
<td>No</td>
<td>100 lb final RQ: 45.4 kg final RQ</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

California Prop 65: WARNING: This product contains a chemical known to the state of California to cause cancer.

Section 16
Additional Information

Revised: 09/03/2014
Replaces: 08/27/2014
Printed: 09-11-2014

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH American Conference of Governmental Industrial Hygienists
CAS Chemical Abstract Service Number
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
DOT U.S. Department of Transportation
IARC International Agency for Research on Cancer
N/A Not Available

NTP National Toxicology Program
OSHA Occupational Safety and Health Administration
PEL Permissible Exposure Limit
ppm Parts per million
RCRA Resource Conservation and Recovery Act
SARA Superfund Amendments and Reauthorization Act
TLV Threshold Limit Value
TSCA Toxic Substances Control Act
IDLH Immediately dangerous to life and health