Material Safety Data Sheet

o-Cresol, 98%

Section 1 - Chemical Product and Company Identification

**MSDS Name:** o-Cresol, 98%

**Synonyms:** 2-Methylphenol; 2-Hydroxytoluene; 2-Cresol; o-Cresylic acid.

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>95-48-7</td>
<td>o-Cresol</td>
<td>&gt;98</td>
<td>202-423-8</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** T C

**Risk Phrases:** 34 24/25

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: white to pale yellow solid. Flash Point: 81 deg C. **Danger!** Harmful if swallowed. Corrosive. Toxic. Causes eye and skin burns. Causes digestive and respiratory tract burns. Hygroscopic (absorbs moisture from the air). Light sensitive. Harmful if absorbed through the skin. May be fatal if inhaled. May cause liver and kidney damage. **Combustible liquid and vapor.**

**Target Organs:** Kidneys, central nervous system, liver.

**Potential Health Effects**

**Eye:** May result in corneal injury. Causes eye irritation and burns. May cause conjunctivitis and keratitis.

**Skin:** May be absorbed through the skin in harmful amounts. Causes severe skin irritation and burns.

**Ingestion:** Causes gastrointestinal irritation with nausea, vomiting and diarrhea. Causes gastrointestinal tract burns. May cause liver and kidney damage. Cresols may cause abnormalities of the central nervous system, respiratory system, spleen and pancreas.

**Inhalation:** May be fatal if inhaled. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. May cause headache. May cause nausea and possible vomiting.

**Chronic:** May cause liver and kidney damage. May cause appetite loss, diarrhea, skin abnormalities, and digestive tract disturbances.

Section 4 - First Aid Measures

**Eyes:** Get medical aid immediately. Do NOT allow victim to rub eyes or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).
**Skin:** Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Discard contaminated clothing in a manner which limits further exposure. Destroy contaminated shoes.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen.

**Notes to Physician:** Treat symptomatically and supportively.

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**Section 5 - Fire Fighting Measures**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

**Extinguishing Media:** For small fires, use dry chemical, carbon dioxide, or water spray. For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray.

- **Flash Point:** 81 deg C (177.80 deg F)
- **Autoignition Temperature:** 598 deg C (1,108.40 deg F)
- **Explosion Limits, Lower:** 1.30 vol %
- **Upper:** Not available.
- **NFPA Rating:** (estimated) Health: ; Flammability: 2; Instability:

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**Section 6 - Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

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**Section 7 - Handling and Storage**

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Ground and bond containers when transferring material. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not ingest or inhale. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage:** Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Corrosives area.

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**Section 8 - Exposure Controls, Personal Protection**
**Engineering Controls:** Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>o-Cresol</td>
<td>5 ppm TWA; skin - potential for cutaneous absorption</td>
<td>2.3 ppm TWA; 10 mg/m3 TWA 250 ppm IDLH</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.  
**Skin:** Wear appropriate protective gloves to prevent skin exposure.  
**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

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**Section 9 - Physical and Chemical Properties**

- **Physical State:** Solid  
- **Appearance:** white to pale yellow  
- **Odor:** Phenolic.  
- **pH:** Not available.  
- **Vapor Pressure:** .25 mm Hg @ 25C  
- **Vapor Density:** 3.72 (air=1)  
- **Evaporation Rate:** Not available.  
- **Viscosity:** 4.75 cP 35 deg C  
- **Boiling Point:** 191 deg C @ 760 mm Hg  
- **Freezing/Melting Point:** 32 - 34 deg C  
- **Decomposition Temperature:** Not available.  
- **Solubility:** 30.8 g/L @ 40°C  
- **Specific Gravity/Density:** 1.04 g/cm3  
- **Molecular Formula:** C7H8O  
- **Molecular Weight:** 108.14

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**Section 10 - Stability and Reactivity**

- **Chemical Stability:** Stable under normal temperatures and pressures.  
- **Conditions to Avoid:** High temperatures, light, ignition sources, excess heat.  
- **Incompatibilities with Other Materials:** Strong oxidizing agents, strong acids, bases, aliphatic amines, chlorosulfonic acid, oleum.  
- **Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.  
- **Hazardous Polymerization:** Has not been reported.

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**Section 11 - Toxicological Information**

**RTECS#:**  
**CAS#: 95-48-7: GO6300000**  
**LD50/LC50:**
CAS# 95-48-7:
Draize test, rabbit, eye: 105 mg Severe;
Draize test, rabbit, skin: 524 mg/24H Severe;
Inhalation, mouse: LC50 = 179 mg/m3/2H;
Inhalation, mouse: LC50 = 179 mg/m3;
Inhalation, rat: LC50 = >1220 mg/m3/1H;
Inhalation, rat: LC50 = 29 mg/m3;
Oral, mouse: LD50 = 344 mg/kg;
Oral, rabbit: LD50 = 940 mg/kg;
Oral, rat: LD50 = 121 mg/kg;
Oral, rat: LD50 = 1350 mg/kg;
Skin, rabbit: LD50 = 890 mg/kg;
Skin, rat: LD50 = 620 mg/kg;
Skin, rat: LD50 = 620 mg/kg;<BR.

**Carcinogenicity:**
CAS# 95-48-7: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

**Epidemiology:** No information available.

**Teratogenicity:** No information available.

**Reproductive Effects:** No information available.

**Neurotoxicity:** No information available.

**Mutagenicity:** No information available.

**Other Studies:** None.

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**Section 12 - Ecological Information**

**Ecotoxicity:** No data available. Goldfish (soft water) TLm=49.1-19ppm/24-96H
Bluegill (soft water) TLm=22.2-20.8ppm/24-96H Fathead minnow (hard water)
TLm=18-13.4ppm/24-96H Guppy (hard water) TLm=18-50ppm/24-96H

**Environmental:** In air, substance will react with photochemically-produced hydroxyl radicals (day) and nitrate radicals (night). In water, substance will biodegrade within days. Substance is mobile in most soils and will biodegrade.

**Physical:** No information available.

**Other:** Please refer to the Handbook of Environmental Fate and Exposure Data (Vol 1) for additional information.

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**Section 13 - Disposal Considerations**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

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**Section 14 - Transport Information**
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<th>IATA</th>
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<tbody>
<tr>
<td>Shipping Name:</td>
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<tr>
<td>Hazard Class:</td>
</tr>
<tr>
<td>UN Number:</td>
</tr>
<tr>
<td>Packing Group:</td>
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</tbody>
</table>

**Section 15 - Regulatory Information**

**Hazard Symbols:**
T C

**Risk Phrases:**
R 34 Causes burns.
R 24/25 Toxic in contact with skin and if swallowed.

**Safety Phrases:**
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Section 16 - Additional Information**

**MSDS Creation Date:** 10/15/1997
**Revision #4 Date:** 3/04/2004

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51/57, don tad street, 1st floor, off no. 11, mumbai - 400 009, india
www.indogulfgroup.com