

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : *p*-Cresol  
 Product Number : 61030  
 Brand : Sigma-Aldrich  
 Company : Sigma-Aldrich Canada, Ltd  
 2149 Winston Park Drive  
 OAKVILLE ON L6H 6J8  
 CANADA  
 Telephone : +19058299500  
 Fax : +19058299292  
 Emergency Phone # : 800-424-9300

**2. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : 4-Methylphenol  
 Formula : C<sub>7</sub>H<sub>8</sub>O  
 Molecular Weight : 108.14 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
<b>p-Cresol</b>			
106-44-5	203-398-6	604-004-00-9	-

**3. HAZARDS IDENTIFICATION****Emergency Overview****Target Organs**

Central nervous system, Lungs, Eyes, Liver, Kidney

**WHMIS Classification**

D1A Very Toxic Material Causing Immediate and Highly toxic by inhalation  
 D1B Serious Toxic Effects Toxic by ingestion  
 Toxic by skin absorption

**HMIS Classification**

**Health Hazard:** 4  
**Chronic Health Hazard:** \*  
**Flammability:** 0  
**Physical hazards:** 1

**Potential Health Effects**

**Inhalation** May be fatal if inhaled. May cause respiratory tract irritation.  
**Skin** Toxic if absorbed through skin. May cause skin irritation.

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**Eyes** May cause eye irritation.  
**Ingestion** Toxic if swallowed.

**4. FIRST AID MEASURES****General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

**If inhaled**

If breathed in, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

**In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

**In case of eye contact**

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**5. FIRE-FIGHTING MEASURES****Flammable properties**

Flash point 85.0 °C (185.0 °F) - closed cup  
 Ignition temperature 559 °C (1,038 °F)

**Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for fire-fighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation. Evacuate personnel to safe areas.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods for cleaning up**

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Handling**

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Storage**

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C

Light sensitive. Store under inert gas. hygroscopic Air and light sensitive. Handle and store under inert gas.

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**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Components with workplace control parameters**

Components	CAS-No.	Value	Control parameters	Update	Basis
p-Cresol	106-44-5	TWA	5 ppm 22 mg/m <sup>3</sup>	2004-04-30	Canada, Occupational Health and Safety Code 218

Remarks: Substance may be readily absorbed through intact skin

		TWA	5 ppm 22 mg/m <sup>3</sup>	2000-01-12	Canada, Act Respecting Occupational Health and Safety [R.S.Q., c.2.1], Regulation respecting Occupational Health and Safety (O.C.885-2001), Division XV, Sections 130-14
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SKIN (percutaneous) : The designation "Pc" in the Designation and remarks column refers to the potentially significant contribution to the overall exposure by the cutaneous route. Exposure is by contact with vapours or, of probable greater significance, by direct skin contact with the substance. The cutaneous route includes mucous membranes and the eyes.

		TWA	5 ppm 22 mg/m <sup>3</sup>	2005-02-03	Canada, Occupational Health and Safety Act [R.S.O. 1990, c.1], Industrial Establishments (R.R.O. 1990, Reg 851), 139
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The notation "skin" following the name of an agent in this Schedule indicates that direct or airborne contact with the agents may result in significant absorption of the agent through the skin, mucous membranes or eyes. Vehicles, such as certain solvents, may enhance the rate of skin absorption. Inclusion of this notation is intended to suggest that preventative action should be taken against absorption of the agent through the skin, mucous membranes or eyes.

		TWA	10 mg/m <sup>3</sup>	2004-08-01	Canada, Worker's Compensation Act, Occupational Health and Safety Regulations (BC Reg 296/97 as amended), 7.2 [B.C. Reg. 382/2004, s.1]
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The term "skin" identifies substances that contribute significantly to the overall exposure by the skin route.

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**Personal protective equipment****Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with gloves.

**Eye protection**

Safety glasses

**Skin and body protection**

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Hygiene measures**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Form crystalline  
 Colour colourless

**Safety data**

pH no data available  
 Melting point 32 - 34 °C (90 - 93 °F)  
 32 - 35 °C (90 - 95 °F)  
 Boiling point 202 °C (396 °F)  
 Flash point 85.0 °C (185.0 °F) - closed cup  
 Ignition temperature 559 °C (1,038 °F)  
 Lower explosion limit 1.1 %(V)  
 Vapour pressure 1.3 hPa (1.0 mmHg) at 20.0 °C (68.0 °F)  
 Density 1.034 g/mL at 25 °C (77 °F)  
 Water solubility no data available  
 Partition coefficient: log Pow: 1.94  
 n-octanol/water

**10. STABILITY AND REACTIVITY****Storage stability**

Stable under recommended storage conditions.

**Materials to avoid**

Oxidizing agents, Bases

**Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Carbon oxides

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**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

LD50 Oral - rat - 207.0 mg/kg

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Olfaction:Other changes.  
 Behavioral:Convulsions or effect on seizure threshold. Gastrointestinal:Ulceration or bleeding from stomach.

LC50 Inhalation - rat - 1 h - > 710.0 mg/m<sup>3</sup>

LD50 Dermal - rabbit - 301.0 mg/kg

Remarks: Behavioral:Tremor. Gastrointestinal:Changes in structure or function of salivary glands. Kidney, Ureter, Bladder:Other changes.

**Irritation and corrosion**

Skin - rabbit - Severe irritation - 24 h

Eyes - rabbit - Severe irritation

**Sensitisation**

no data available

**Chronic exposure**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Signs and Symptoms of Exposure**

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Dizziness, Cardiovascular effects., Muscle cramps/spasms.

**Potential Health Effects**

**Inhalation** May be fatal if inhaled. May cause respiratory tract irritation.  
**Skin** Toxic if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.  
**Ingestion** Toxic if swallowed.  
**Target Organs** Central nervous system, Lungs, Eyes, Liver, Kidney,

**Additional Information**

RTECS: GO6475000

**12. ECOLOGICAL INFORMATION****Elimination information (persistence and degradability)****Ecotoxicity effects**

Toxicity to fish LC50 - No information available. - 16.00 - 24.00 mg/l - 24 h  
 LC50 - Oncorhynchus mykiss (rainbow trout) - 7.9 mg/l - 96 h  
 Toxicity to daphnia and other aquatic invertebrates. LC50 - Daphnia magna (Water flea) - 1.4 mg/l - 48 h

**Further information on ecology**

no data available

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**13. DISPOSAL CONSIDERATIONS****Product**

Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION****DOT (US)**

UN-Number: 3455 Class: 6.1 (8) Packing group: II

Proper shipping name: Cresols, solid

Marine pollutant: No

Poison Inhalation Hazard: No

**IMDG**

UN-Number: 3455 Class: 6.1 (8) Packing group: II EMS-No: F-A, S-B

Proper shipping name: CRESOLS, SOLID

Marine pollutant: No

**IATA**

UN-Number: 3455 Class: 6.1 (8) Packing group: II

Proper shipping name: Cresols, solid

**15. REGULATORY INFORMATION****DSL Status**

All components of this product are on the Canadian DSL list.

**WHMIS Classification**

D1A Very Toxic Material Causing Immediate and Highly toxic by inhalation  
 D1B Serious Toxic Effects Toxic by ingestion  
 Toxic by skin absorption

**16. OTHER INFORMATION****Further information**

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