

OC305

# Material Safety Data Sheet

## SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

**Trade name** OC305  
**Synonyms** Cresol  
**Manufacturer/Supplier** Merisol USA LLC  
**Address** 1914 Haden Road, Houston, TX 77015-6498  
**Telephone** CHEMTREC North America Transportation Emergency (24-hr) (800) 424-9300  
 CHEMTREC World Wide (703) 527-3887  
 Other Emergencies (24-hr) (713) 428 5400  
 MSDS and Product Information (8:00am-4:30pm CST) (713) 428 5400  
 Health and Safety Information (8:00am-4:00pm CST) (713) 428 5400

## SECTION 2 COMPOSITION AND INFORMATION ON INGREDIENTS

<u>Components</u>	<u>CAS-No.</u>	<u>Weight %</u>
o-Cresol	95-48-7	100

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

## SECTION 3 HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

**Appearance** White to amber liquid or crystalline solid  
**Odor** Antiseptic  
**Precautions** **DANGER!** CAUSES SEVERE BURNS. COMBUSTIBLE LIQUID Harmful if inhaled. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.  
**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not contaminate any lakes, streams, ponds, groundwater or soil. Low to moderate aquatic toxicity. Product is expected to undergo biodegradation at the levels anticipated in the environment.

### POTENTIAL HEALTH EFFECTS

**Eyes** Contact can cause severe irritation and burns of the eyes with possible permanent damage.

**Skin** Acute dermal irritation/corrosion. Causes severe burns which may not be immediately painful or visible. Repeated or prolonged contact can cause redness, irritation and scaling of the skin (dermatitis). Liver and kidney injuries may occur.

**Inhalation** May cause respiratory tract irritation. May cause headache and dizziness.

**Ingestion** Harmful or fatal if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Rapid heartbeat, systolic hypotension, respiratory failure, myocardial failure, and pulmonary edema

**Target Organs** Lungs, Kidney, Liver, Central nervous system, Heart, Pancreas, Spleen,

**Additional advice** Rapid absorption and severe systemic toxicity can occur after any route of exposure.

(See Section 11 for Toxicological Information)

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## SECTION 4 FIRST AID MEASURES

**Eye contact** Danger of very serious irreversible effects. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Obtain medical attention.

**Skin contact** Take off contaminated clothing and shoes immediately. If possible, quickly blot material from skin to avoid spreading it. Rapid skin decontamination is critical. Wash off immediately with plenty of water. Wash off with polyethylene glycol and afterwards with plenty of water. Apply PEG/EtOH solution liberally to affected area. Allow to remain 15 to 30 seconds, then wash with water. Continue cycle of water - PEG/EtOH solution for at least 15 minutes (PEG/EtOH solution consists of 2 parts polyethylene glycol 400 to 1 part ethanol. For external use only.) Wash off with soap and water. Obtain medical attention. Wash contaminated clothing before re-use.

**Inhalation** Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. If breathing is difficult, give oxygen. Keep patient warm and at rest. Obtain medical attention.

**Ingestion** If accidentally swallowed obtain immediate medical attention. Immediately give plenty of water (if possible charcoal slurry). Do NOT induce vomiting.

**Additional advice** There is no specific antidote. Treatment consists of support of respiratory and cardiovascular functions.

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## SECTION 5 FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES

**Flash point** 81 °C 177.8 °F

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<b>Autoignition temperature</b>	599 °C    1,110 °F
<b>Flammable limits in air % by volume</b>	<b>Lower explosion limit:</b> 1.4 %(V) <b>Upper explosion limit:</b> 7.6 %(V)
<b>Fire and explosion</b>	Fire or intense heat may cause violent rupture of packages. Material will burn in a fire.
<b>Extinguishing media</b>	Water spray or fog, foam, dry chemical, CO <sub>2</sub> . Do NOT use water jet.
<b>Fire fighting instructions</b>	Wear self-contained breathing apparatus and protective suit.
<b>Further information</b>	Evacuate personnel to safe areas. Stop source of fuel if possible. Keep containers and surroundings cool with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Avoid contact with runoff water. Potential hazard exists from Cresylic acid vapors carried downwind.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

<b>Steps to be taken in case of spill or leak</b>	Evacuate the area and eliminate all sources of ignition. Only properly trained personnel should respond to spills or leaks. Use personal protective equipment. Land spill: Contain spilled liquid with sand, absorbent material, or concrete dikes for recovery or disposal. Do not flush into surface water or sanitary sewer system. Soak up with inert absorbent material and dispose of as hazardous waste. Water spill: Contain spill with booms. Remove material that settles in deeper areas of waterway. Cresylic acids tend to sink in fresh water and float in concentrated brine. Non-disposable equipment should be thoroughly decontaminated with soap and water. Prevent further leakage or spillage if safe to do so. Do not contaminate any lakes, streams, ponds, groundwater or soil.
<b>Spill precautions</b>	Do not contaminate any lakes, streams, ponds, groundwater or soil.
<b>Reporting Requirements</b>	Composition and extent of any spill should be evaluated against local regulations and reported to the proper agencies, if necessary.

## SECTION 7 HANDLING AND STORAGE

<b>Safe handling advice</b>	Use only in well-ventilated areas. Use only in an area equipped with a safety shower. Handle and open container with care. Do not use pressure to empty drums. Heat only in areas with appropriate exhaust ventilation. Drums should be vented during melting and unloading. Transfer lines and vents should be heated when working with freezable material to avoid pressure differences due to blockages. Vapors should be routed through an appropriate scrubber or flare to avoid release to the atmosphere. Avoid overheating as it may lead to excessive vapors, discoloration, and spillage caused by thermal expansion.
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**Storage and handling materials** Suitable: TANKS: carbon steel stainless steel  
 Unsuitable: Avoid use of aluminum, copper or brass alloys in storage or process equipment which will contact this material

**Shelf life** Keep container tightly closed in a dry and well-ventilated place. Keep away from food, drink and animal feeding stuffs. Keep away from sources of ignition - No smoking. Inert gas blanket and breathing system needed to maintain color stability.

**Further information on storage conditions** Corrosive. Hygroscopic. May exhibit supercooling and crystallize rapidly when seeded or subjected to physical shock.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### ENGINEERING MEASURES

Provide adequate ventilation. Mechanical ventilation may be necessary if working with this product in enclosed areas and/or at elevated temperatures. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### PERSONAL PROTECTIVE EQUIPMENT

**Eyes** When contact with liquid is possible, use a face shield and/or chemical splash goggles. Otherwise use safety glasses with side shields or goggles.

**Skin** Full protective clothing, chemical boots, and chemical gloves. Heavy PVC or butyl-viton gloves are recommended. Non-disposable equipment should be thoroughly decontaminated with soap and water.

**Inhalation** NIOSH-approved organic vapor air-purifying respirator, self-contained breathing apparatus, or air-supplied respirators where there may be potential for overexposure.

### EXPOSURE GUIDELINES

<u>Components</u>	<u>Exposure limit(s)</u>
<b>o-Cresol</b>	OSHA PEL 5 ppm ACGIH TLV (8-hour) 5 ppm
Naphthalene	OSHA PEL 10 ppm ACGIH TLV (8-hour) 10 ppm ACGIH STEL 15 ppm

PEL= Permissible Exposure Limits  
 TLV= Threshold Limit Value  
 EL= Excursion Limit

TWA= Time Weighted Average (8 hr.)  
 STEL= Short Term Exposure Limit (15 min.)  
 WEEL= Workplace Environmental Exposure Level

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** liquid or crystalline solid

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<b>Color</b>	White to amber
<b>Odor</b>	Antiseptic
<b>Form</b>	liquid or crystalline solid
<b>Boiling point/range</b>	191 °C 375 °F
<b>Vapor pressure</b>	0.5 mm Hg @ 30 °C
<b>Vapor density</b>	3.72
<b>Solubility (water)</b>	30 g/l @ 100°C
<b>Viscosity, dynamic</b>	3 mPa.s @ 50 °C
<b>Melting point/range</b>	31 °C 87.8 °F
<b>Density</b>	1.04 g/cm <sup>3</sup> @ 15.5 °C
<b>pH</b>	5.5
<b>LogKow</b>	1.95

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## SECTION 10 STABILITY AND REACTIVITY

<b>Conditions to avoid</b>	Stable under normal conditions.
<b>Hazardous decomposition products</b>	Combustion products include carbon dioxide, carbon monoxide and possibly other unidentified organic compounds.
<b>Incompatibility with other materials</b>	strong oxidizing agents
<b>Hazardous polymerization</b>	Hazardous polymerization does not occur.

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## SECTION 11 TOXICOLOGICAL INFORMATION

### Skin

**o-Cresol** Acute dermal LD50 (rodent): 620 mg/kg

### Inhalation

**o-Cresol** Repeated inhalation exposure has resulted in central nervous system effects and blood changes.

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### Ingestion

**o-Cresol** Acute oral LD50 (rat): 121 - 1,350 mg/kg  
Repeat high level oral exposure of rats and mice produced changes in liver and kidney weights, estrus cycles, bone marrow and female reproductive organs, as well as, irritation of the respiratory and gastrointestinal tracts.

### Carcinogenicity

**o-Cresol** This substance is reported to have tumor promoting activity in mice following skin application. The human health significance of this finding is uncertain. This chemical is not listed for carcinogenicity by IARC, NTP or OSHA.

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## SECTION 12 ECOLOGICAL INFORMATION

**Aquatic toxicity** Low to moderate aquatic toxicity.

**o-Cresol** LC50 (Fish): 96 hours 6.2 - 23.3 mg/l  
LC50 (Daphnia): 48 hours 5 - 21 mg/l  
EC50 (algae): 96 hours 40 - 100 mg/l

**Biodegradation** Product is expected to undergo biodegradation at the levels anticipated in the environment.

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## SECTION 13 DISPOSAL CONSIDERATIONS

**Disposal methods** Dispose of only in accordance with local, state, and federal regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.

**Empty containers** Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

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## SECTION 14 TRANSPORT INFORMATION

**DOT description** RQ, Cresols, solid, molten, 6.1, UN 3455, II, (8)  
**IATA description** Cresols, solid, molten, 6.1, UN 3455, II, (8)  
**IMDG Description** Cresols, solid, molten, 6.1, UN 3455, II, (8)

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## SECTION 15 REGULATORY INFORMATION

### U.S. FEDERAL REGULATIONS

#### OSHA classification

Toxic, Corrosive., Combustible liquid.

#### TSCA Inventory Listing

##### Components

##### CAS-No.

Phenol, 2-methyl

95-48-7

#### SARA 302 Status

##### Components

##### CAS-No.

##### Weight %

Contains no chemicals subject to SARA 302 reporting.

#### SARA 311/312 Classification

"Immediate (acute) health hazard", Fire Hazard

#### SARA 313 Chemical

##### Components

##### CAS-No.

##### Weight %

Phenol, 2-methyl

95-48-7

100

Naphthalene

91-20-3

0

#### CERCLA Hazardous Substance

##### Components

##### CERCLA RQ

##### Weight %

Phenol, 2-methyl

100 LB

100

Naphthalene

100 LB

0

### INTERNATIONAL REGULATIONS

#### Workplace Hazardous Materials Information System (WHMIS) Classification

Combustible Liquid

Toxic Material Causing Immediate and Serious Toxic Effects

Corrosive Material

#### Australian Inventory of Chemical Substances (AICS) Listing

Listed on the AICS.

#### Japanese Minister of International Trade and Industry (MITI) Inventory Listing

Listed on MITI.

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**Canadian Domestic Substance List (DSL) Inventory Listing**

Listed on the DSL.

**European Inventory of Existing Commercial Chemical Substances (EINECS) Listing**

Listed on EINECS.

**Philippines Inventory List (PICCS)**

Listed on PICCS.

**Korean Inventory List**

Listed on the ECL.

**China Inventory List**

Listed on the China inventory.

**STATE REGULATIONS**

**California Safe Drinking Water Act (Prop 65) Listing**

**Components**

**CAS-No.**

Naphthalene

91-20-3

This product may contain residual amounts of Naphthalene at concentrations typically from less than 10 ppm to 0.9%. MERISOL does not analyze specifically for Proposition 65 listed chemicals; however, through process knowledge, the following components may be present at concentrations of less than 100 ppm: Toluene, Aniline, o-Toluidine, 2,6-Xylidine. Merisol's manufacturing process is intended to minimize impurities which would include these potential components.

**SECTION 16 OTHER INFORMATION**

**HAZARD RATINGS**

	<u>Health</u>	<u>Flammability</u>	<u>Reactivity</u>
<b>NFPA</b>	3	2	0

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