

## MC99

## SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

<b>Trade name</b>	MC99	
<b>Synonyms</b>	Cresol	
<b>Use</b>	Intermediate, Solvent mixture	
<b>Company</b>	Sasol Chemicals (USA) LLC (an affiliate of Sasol Chemicals North America LLC)	
<b>Address</b>	1914 Haden Road, Houston, TX 77015-6498	
<b>Telephone</b>	CHEMTREC North America Transportation Emergency (24-hr)	(800) 424 9300
	CHEMTREC World Wide	(703) 527-3887
	Other Emergencies (24-hr)	(832) 783 6600
	SDS and Product Information (8:00am-4:30pm CST)	(832) 783 6400
	Health and Safety Information (7:30am-4:00pm CST)	(281) 588 3491
	NCEC - Europe, Israel, Africa, Americas	+44 (0) 2087 628 322
	NCEC - Middle East, Arabic African countries (where European languages are spoken)	+44 (0) 1235 239 670
	NCEC - Middle East/Africa (where Arabic is spoken)	+44 (0) 1235 239 671
	NCEC - Asia Pacific	+65 3158 1074
	NCEC - China	+86 10 5100 3039
	NCEC - Australia	+61 2801 44558
<b>E-mail address</b>	SasolElectronicSDS@us.sasol.com	

## SECTION 2 HAZARDS IDENTIFICATION

<b>OSHA/GHS Hazards</b>	Acute toxicity (Oral)	Category 3
	Acute toxicity (Inhalation)	Category 4
	Acute toxicity (Dermal)	Category 3
	Skin corrosion	Category 1B
	Serious eye damage	Category 1
	Specific target organ toxicity - repeated exposure	Category 2
	Acute aquatic toxicity	Category 2
	Chronic aquatic toxicity	Category 3

### LABEL ELEMENTS

#### Hazard symbols



**MC99**

---

**Signal word** Danger

**Hazard statements** H301 + H311 Toxic if swallowed or in contact with skin.  
H332 Harmful if inhaled.  
H314 Causes severe skin burns and eye damage.  
H373 May cause damage to organs (Central nervous system, Hematopoietic system, Kidney, Lungs) through prolonged or repeated exposure.  
H401 Toxic to aquatic life.  
H412 Harmful to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention** P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P273 Avoid release to the environment.

**Response** P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.  
P363 Wash contaminated clothing before reuse.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER/doctor.  
P391 Collect spillage.

**Storage** P405 Store locked up.

**Disposal** P501 Dispose of contents/ container to an approved waste disposal plant.

---

**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**

---

<u>Components</u>	<u>CAS-No.</u>	<u>Weight percent</u>
m-Cresol	108-39-4	99
p-Cresol	106-44-5	1

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

MC99

---

---

**SECTION 4 FIRST AID MEASURES**

---

- Eye contact** In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately.
- 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. Keep patient warm and at rest. Obtain medical attention. If breathing is irregular or stopped, administer artificial respiration. Inhalation of vapors in high concentration may cause shortness of breath (lung edema). In case of shortness of breath, give oxygen.
- Ingestion** Call a physician or poison control centre immediately. Do NOT induce vomiting. Rinse mouth. Immediately give plenty of water (if possible charcoal slurry). Never give anything by mouth to an unconscious person.

---

**SECTION 5 FIREFIGHTING MEASURES**

---

**FLAMMABLE PROPERTIES**

- Fire/explosion** May be ignited by open flame. NFPA Class IIIB combustible liquid.
- Suitable extinguishing media** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide., Do NOT use water jet.
- Protective equipment and precautions for firefighters** Wear self-contained breathing apparatus and protective suit.
- Further information** Evacuate personnel to safe areas. Prevent further leakage or spillage if safe to do so. Keep containers and surroundings cool with water spray. In the event of fire and/or explosion do not breathe fumes. Avoid contact with runoff water

MC99

---

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

---

**Methods and materials for containment and cleaning up** Evacuate personnel to safe areas. Use personal protective equipment. Land spill: Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13). Do not flush into surface water or sanitary sewer system. Water spill: Contain spill with booms. Remove material that settles in deeper areas of waterway. 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.

---

**SECTION 7 HANDLING AND STORAGE**

---

**Safe handling advice** Wear personal protective equipment. Avoid contact with skin and eyes. Provide sufficient air exchange and/or exhaust in work rooms. In case of insufficient ventilation, wear suitable respiratory equipment.

**Storage and handling materials** Unsuitable: Avoid use of aluminum, copper or brass alloys in storage or process equipment which will contact this material

**Further information on storage conditions** Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

---

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**ENGINEERING MEASURES**

Ensure adequate ventilation, especially in confined areas.

**PERSONAL PROTECTIVE EQUIPMENT**

**Eyes** Chemical resistant goggles must be worn., Wear as appropriate:, Face-shield

**Skin** Full protective clothing, chemical boots, and chemical gloves. Impervious gloves. Non-disposable equipment should be thoroughly decontaminated with soap and water.

**Inhalation** Use NIOSH approved respiratory protection. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**EXPOSURE GUIDELINES**

<u>Components</u>	<u>Exposure limit(s)</u>
<b>m-Cresol</b>	ACGIH TLV (8-hour) 20 mg/m <sup>3</sup> (inhalable fraction and/or vapor) NIOSH Recommended Exposure Limit 2.3 ppm 10 mg/m <sup>3</sup> NIOSH NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations) 250 ppm OSHA PEL (Permissible Exposure Limit) 5 ppm 22 mg/m <sup>3</sup>
<b>p-Cresol</b>	ACGIH TLV (8-hour) 20 mg/m <sup>3</sup> (inhalable fraction and/or vapor) NIOSH Recommended Exposure Limit 2.3 ppm 10 mg/m <sup>3</sup> NIOSH NIOSH IDLH (Immediately Dangerous to Life or Health Concentrations) 250 ppm

**MC99**

---

OSHA PEL (Permissible Exposure Limit) 5 ppm 22 mg/m<sup>3</sup>

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**

---

<b>Appearance</b>	liquid
<b>Colour</b>	clear to amber
<b>Form</b>	liquid
<b>Odour</b>	Antiseptic
<b>Odour Threshold</b>	No data available
<b>Flash point</b>	94 °C, 201.2 °F
<b>Flammability</b>	Upper explosion limit: 7.6 %(V) Lower explosion limit: 1.1 %(V)
<b>Boiling point/boiling range</b>	202 °C, 395 °F
<b>Melting point/range</b>	12 °C, 53 °F
<b>Auto-ignition temperature</b>	559 °C, 1,038 °F
<b>Decomposition temperature</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Vapour pressure</b>	0.14 mm Hg @ 25 °C, 77 °F
<b>Vapour density</b>	3.72
<b>Density</b>	1.04 g/cm <sup>3</sup> @ 15.5 °C, 59.9 °F
<b>Relative density</b>	1.04 @ 15.5 °C, 59.9 °F
<b>Water solubility</b>	20 g/l @ 25 °C, 77 °F

**MC99**

---

<b>Viscosity</b>	No data available
<b>Viscosity, dynamic</b>	4 mPa.s @ 50 °C, 122 °F
<b>pH</b>	5.5
<b>Evaporation rate</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	log Pow: 1.96
<b>Molecular weight</b>	108 g/mol

---

**SECTION 10 STABILITY AND REACTIVITY**

---

<b>Reactivity</b>	No dangerous reaction known under conditions of normal use.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Keep away from heat and sources of ignition.
<b>Hazardous decomposition products</b>	Combustion products include carbon dioxide, carbon monoxide and possibly other unidentified organic compounds.
<b>Materials to avoid</b>	Incompatible with strong acids and bases. Incompatible with oxidizing agents. Copper and brass alloys Aluminium
<b>Hazardous polymerisation</b>	Hazardous polymerisation does not occur.

---

**SECTION 11 TOXICOLOGICAL INFORMATION**

---

<b>Additional Remarks</b>	Information given is based on data obtained from similar substances or components of this material.
<b>Acute dermal toxicity</b>	301 mg/kg (calculated ATE)
<b>Acute inhalation toxicity</b>	1.5 mg/l (calculated ATE)
<b>Acute oral toxicity</b>	100 mg/kg (calculated ATE)

**MC99**

---

**Skin corrosion/irritation** Causes severe skin burns and eye damage.

**Serious eye damage/eye irritation** Causes serious eye damage.

**Respiratory or skin sensitisation** No data available

**Germ cell mutagenicity** **Genotoxicity in vitro:**  
Test substance: cresols  
In vitro tests showed mutagenic effects which were not observed with in vivo test.

**Genotoxicity in vivo:**  
Test substance: cresols  
In vivo tests did not show mutagenic effects

**Assessment Mutagenicity:**  
Based on available data, the classification criteria are not met.

**Reproductive toxicity** **Reproductive toxicity:**  
Rat; Oral;  
NOAEL (parents): 375 mg/kg  
Test substance: cresols

**Assessment Reproductive toxicity:**  
Based on available data, the classification criteria are not met.

**Teratogenicity:**  
Rabbit; Oral;  
NOAEL (teratogen): 100 mg/kg  
Test substance: cresols

**Assessment teratogenicity:**  
Based on available data, the classification criteria are not met.

**STOT - single exposure** The substance or mixture is not classified as specific target organ toxicant, single exposure.

**STOT - repeated exposure** LOAEL: 0.0009 mg/l. Inhalation; Short-term exposure;  
Test substance: mixed cresols; Category approach  
Target Organs: Hematopoietic system

Rat; . Oral; 13 weeks;  
LOAEL: 50 mg/kg  
Test substance: cresols; Category approach  
Target Organs: Kidney

**MC99**

---

Mouse; . Oral; 2 years;  
LOAEL: 100 mg/kg  
Test substance: mixed cresols  
Target Organs: Lungs

Target Organs: Central nervous system, Hematopoietic system, Kidney, Lungs  
The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

**Aspiration toxicity** Not applicable

**Carcinogenicity** **Assessment carcinogenicity:**  
Contains no ingredient listed as a carcinogen

---

**SECTION 12 ECOLOGICAL INFORMATION**

---

**Aquatic toxicity** Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

**Toxicity to fish** LC50 (Salmo trutta (brown trout)) 96 hours: > 1 - 10 mg/l  
Test substance: p-Cresol  
(literature value)

LC50 (Salvelinus fontinalis (Brook trout)) 96 hours: > 1 - 10 mg/l  
Test substance: m-Cresol  
(literature value)

**Toxicity to aquatic invertebrates** EC50 (Daphnia magna (Water flea)) 48 hours: > 10 - 100 mg/l  
Test substance: m-Cresol  
(literature value)

EC50 (Daphnia magna (Water flea)) 48 hours: > 1 - 10 mg/l  
Test substance: p-Cresol  
(literature value)

**Toxicity to algae** ErC50 (Desmodesmus subspicatus (green algae)) 48 hours: > 10 - 100 mg/l  
Test substance: p-Cresol  
(literature value)

ErC10 (Desmodesmus subspicatus (green algae)) 48 hours: > 1 - 10 mg/l  
Test substance: p-Cresol  
(literature value)

**Chronic toxicity to fish** NOEC (Pimephales promelas (fathead minnow)) 32 d: > 1 - 10 mg/l  
Test substance: p-Cresol  
(literature value)



**MC99**

---

<b>Chronic toxicity to aquatic invertebrates</b>	NOEC (Daphnia magna (Water flea)) 21 d: > 0.1 - 1 mg/l Test substance: p-Cresol (literature value)
<b>Biodegradation</b>	Product is expected to undergo biodegradation at the levels anticipated in the environment. Readily biodegradable. OECD Test Guideline 301C (40 d): > 60 % Test substance: p-Cresol (literature value)  Readily biodegradable. OECD Test Guideline 301D (28 d): > 60 % Test substance: m-Cresol (literature value)
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	No data available

---

**SECTION 13                      DISPOSAL CONSIDERATIONS**

---

<b>Waste Code</b>	Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification.
<b>Disposal methods</b>	Dispose of only in accordance with local, state, and federal regulations. Do not contaminate any lakes, streams, ponds, groundwater or soil.
<b>Empty containers.</b>	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.

---

**SECTION 14                      TRANSPORT INFORMATION**

---

<b>DOT</b>	UN 2076, Cresols, liquid, 6.1 (8), II RQ = 100 lbs.
------------	--

**MC99**

**IATA** UN 2076, Cresols, liquid, 6.1 (8), II  
RQ = 100 lbs.  
ERG Code: 6C

**IMDG** UN 2076, Cresols, liquid, 6.1 (8), II  
RQ = 100 lbs.  
EmS No.F-A, S-B

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

**Remarks** No data available

**SECTION 15 REGULATORY INFORMATION****U.S. FEDERAL REGULATIONS****TSCA Inventory Listing****Components**

Phenol, 3-methyl  
Phenol, 4-methyl

**CAS-No.**

108-39-4  
106-44-5

**SARA 302 Status****Components****CAS-No.****Weight percent**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 311/312 Classification**

Acute toxicity, Skin corrosion, Serious eye damage, Specific target organ toxicity - repeated exposure

**SARA 313 Chemical****Components**

Phenol, 3-methyl  
Phenol, 4-methyl

**CAS-No.**

108-39-4  
106-44-5

**Weight percent**

99 %  
1 %

**US. EPA CERCLA Hazardous Substances (40 CFR 302)****Components**

Phenol, 3-methyl  
Phenol, 4-methyl

**Reportable Quantity**

100 LB  
100 LB

**Weight percent**

99 %  
1 %

**MC99**

---

**INTERNATIONAL REGULATIONS****WHMIS Classification**

Acute toxicity (Oral)	Category 3
Acute toxicity (Inhalation)	Category 4
Acute toxicity (Dermal)	Category 3
Skin corrosion	Category 1B
Serious eye damage	Category 1
Specific target organ toxicity - repeated exposure	Category 2
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 3

**European Union**

Classification according to Regulation (EU) 1272/2008.

Acute toxicity (Oral), Category 3  
Acute toxicity (Dermal), Category 3  
Skin corrosion, Category 1B  
Serious eye damage, Category 1

<b>Australia. Inventory of Chemical Substances (AICS)</b>	Listed
<b>Japan. Inventory of Existing and New Chemical Substances (ENCS)</b>	Listed
<b>Japan. ISHL - Inventory of Chemical Substances</b>	Listed
<b>Canada. Domestic Substances List (DSL) Inventory</b>	Listed
<b>Canada. Non-Domestic Substance Listing (NDSL)</b>	Not listed
<b>Philippines. Inventory of Chemicals / Chemical Substances (PICCS)</b>	Listed
<b>Korea. Existing Chemicals Inventory (KECI)</b>	Listed
<b>China. Inventory of Existing Chemical Substances (IECSC)</b>	Listed
<b>Mexico. National Inventory of Chemical Substances (INSQ)</b>	Listed
<b>New Zealand. Inventory of Chemical Substances (NZIoC)</b>	Listed
<b>Switzerland. Inventory of Notified New Substances (CHINV)</b>	Listed
<b>Taiwan. National Existing Chemical Inventory (NECI)</b>	Listed

**Please note: The names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in Section 3.**

MC99

---

**STATE REGULATIONS**

California Prop. 65  
Components  
none

CAS-No.

---

**SECTION 16            OTHER INFORMATION**

---

**HAZARD RATINGS**

	<u>Health</u>	<u>Flammability</u>	<u>Physical Hazard/ Instability</u>
<b>HMIS®</b>	3	1	0
<b>NFPA</b>	3	1	0

THE DATA AND INFORMATION CONTAINED HEREIN ARE BEING FURNISHED FOR INFORMATIONAL PURPOSES ONLY, UPON THE EXPRESS CONDITION THAT EACH CUSTOMER SHALL MAKE ITS OWN ASSESSMENT OF APPROPRIATE USE AND APPROPRIATE SHIPPING, TRANSFER AND STORAGE MATERIALS AND PROCEDURES FOR SASOL CHEMICALS (USA) LLC'S PRODUCTS. ALTHOUGH BASED ON INFORMATION SOURCES WHICH SASOL CHEMICALS (USA) LLC CONSIDERS ACCURATE AND RELIABLE, SASOL CHEMICALS (USA) LLC MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE VALIDITY OF THIS INFORMATION, THE INFORMATION SOURCES UPON WHICH THE SAME ARE BASED, OR THE RESULTS TO BE OBTAINED, AND EXPRESSLY DISCLAIMS LIABILITIES FOR DAMAGES OR INJURIES RESULTING FROM THE USE THEREOF.

---