

Material Safety Data Sheet

m-Cresol, 97%

ACC# 95808

Section 1 - Chemical Product and Company Identification

MSDS Name: m-Cresol, 97%

Catalog Numbers: AC110580000, AC110580010, AC110580250, AC110585000

Synonyms: 3-Methylphenol; m-Hydroxytoluene; m-Cresylic Acid; 1-Hydroxy-3-Methylbenzene; 3-Cresol.

Company Identification:

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
108-39-4	m-Cresol	97	203-577-9
7732-18-5	Water	<0.2	231-791-2

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: light yellow to light pink liquid. Flash Point: 86 deg C.

Danger! Corrosive. Causes eye and skin burns. Causes digestive and respiratory tract burns. Harmful if swallowed or absorbed through the skin. **Combustible liquid and vapor.** May be harmful if inhaled. May cause central nervous system effects. Air sensitive. Hygroscopic (absorbs moisture from the air). Light sensitive. May cause liver and kidney damage. Marine pollutant.

Target Organs: Kidneys, central nervous system, liver, eyes, skin, mucous membranes.

Potential Health Effects

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

Skin: Harmful if absorbed through the skin. May cause dermatitis. Causes severe skin irritation and burns. Allergic reactions have been reported. When it comes in contact with the skin, it may not produce any burning sensation immediately.

Ingestion: Harmful if swallowed. May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns. May cause liver and kidney damage. May cause central nervous system depression, convulsions, coma, and possible death due to respiratory paralysis.

Inhalation: Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma. May cause effects similar to those described for ingestion. Inhalation of appreciable amounts of vapor under normal conditions is unlikely because of the material's low vapor pressure. Hazardous concentrations may develop at elevated temperatures.

Chronic: Prolonged or repeated skin contact may cause dermatitis. May cause liver and kidney damage. May cause digestive tract disturbances. Repeated exposure may cause central nervous system damage.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician: Treat symptomatically and supportively.

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. Use water spray to keep fire-exposed containers cool. Combustible liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 86 deg C (186.80 deg F)

Autoignition Temperature: 558 deg C (1,036.40 deg F)

Explosion Limits, Lower: 1-1.4%

Upper: Not available.

NFPA Rating: (estimated) Health: 3; Flammability: 2; Instability: 0

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. Remove all sources of ignition. Provide ventilation. Approach spill from upwind. U.S. regulations require reporting spills and releases to soil, water and air in excess of reportable quantities. Control runoff and isolate discharged material for proper disposal.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Discard contaminated shoes. Use only with adequate ventilation. Keep away from heat and flame.

Storage: 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. Store protected from light and air. Separate from oxidizing materials.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
m-Cresol	5 ppm TWA; skin - potential for cutaneous absorption	2.3 ppm TWA; 10 mg/m ³ TWA 250 ppm IDLH	none listed
Water	none listed	none listed	none listed

OSHA Vacated PELs: m-Cresol: No OSHA Vacated PELs are listed for this chemical. Water: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear chemical goggles.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: light yellow to light pink

Odor: phenolic

pH: Not available.

Vapor Pressure: 1 mm Hg @ 52 deg C

Vapor Density: 3.72 (Air=1)

Evaporation Rate: Not available.

Viscosity: 20.8cP @ 20C

Boiling Point: 203 deg C

Freezing/Melting Point: 11 deg C

Decomposition Temperature: Not available.

Solubility: 23 g/L @ 25°C

Specific Gravity/Density: 1.03

Molecular Formula: C₇H₈O

Molecular Weight: 108.14

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Darkens on exposure to light and air.

Conditions to Avoid: Light, ignition sources, excess heat, prolonged exposure to air.

Incompatibilities with Other Materials: Oxidizing agents, strong acids, aluminum, brass, bronze, aliphatic amines, amides (e.g. butyramide, diethyltoluamide, dimethyl formamide), chlorosulfonic acid, oleum, alkalis.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, formaldehyde.

Hazardous Polymerization: Has not been reported.

Section 11 - Toxicological Information

RTECS#:

CAS# 108-39-4: G06125000

CAS# 7732-18-5: ZC0110000

LD50/LC50:

CAS# 108-39-4:

Draize test, rabbit, eye: 103 mg Severe;

Draize test, rabbit, skin: 517 mg/24H Severe;

Inhalation, rat: LC50 = >710 mg/m³/1H;

Inhalation, rat: LC50 = 58 mg/m³;

Oral, mouse: LD50 = 828 mg/kg;

Oral, mouse: LD50 = 600 mg/kg;

Oral, rabbit: LD50 = 1400 mg/kg;
Oral, rat: LD50 = 242 mg/kg;
Oral, rat: LD50 = 825 mg/kg;
Oral, rat: LD50 = 242 mg/kg;
Skin, rabbit: LD50 = 2050 mg/kg;
Skin, rabbit: LD50 = 620 mg/kg;
Skin, rat: LD50 = 1100 mg/kg;
Skin, rat: LD50 = 1000
CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg;

Carcinogenicity:

CAS# 108-39-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.
CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: 7 workers exposed to cresol vapor for 1.5-3 yrs experienced headaches with nausea and vomiting. 4 of these workers also had elevated blood pressure, signs of impaired kidney function, blood calcium imbalance, and marked tremors.

Teratogenicity: No data available.

Reproductive Effects: See actual entry in RTECS for complete information.

Neurotoxicity: No data available.

Mutagenicity: See actual entry in RTECS for complete information.

Other Studies: No data available.

Section 12 - Ecological Information

Ecotoxicity: No data available. No information available.

Environmental: In air, cresols quickly break down into other chemicals. Cresols do not evaporate quickly from water, but they can be removed by bacteria. Cresols may last longer in deep groundwater or water that does not have bacteria. In soil, half the total amount of cresols will break down in about a week. Cresols do not appear to accumulate in fish or meat.

Physical: No information available.

Other: No information available.

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.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	CRESOLS, LIQUID	CRESOL
Hazard Class:	6.1	6.1(8)
UN Number:	UN2076	UN2076
Packing Group:	II	II

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 108-39-4 is listed on the TSCA inventory.
CAS# 7732-18-5 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 108-39-4: Effective 10/4/82, Sunset 10/4/92

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

CAS# 108-39-4: 100 lb final RQ; 45.4 kg final RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 108-39-4: acute, chronic, flammable.

Section 313

This material contains m-Cresol (CAS# 108-39-4, 97%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Clean Air Act:

CAS# 108-39-4 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

Clean Water Act:

CAS# 108-39-4 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 108-39-4 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

CAS# 7732-18-5 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****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).

WGK (Water Danger/Protection)

CAS# 108-39-4: 2

CAS# 7732-18-5: No information available.

Canada - DSL/NDSL

CAS# 108-39-4 is listed on Canada's DSL List.

CAS# 7732-18-5 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B3, D1A, E.

Canadian Ingredient Disclosure List

CAS# 108-39-4 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 1/08/1998

Revision #6 Date: 3/04/2004

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.