



SAFETY DATA SHEET
North America U.S. GHS Format

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1. IDENTIFICATION OF THE SUBSTANCE AND COMPANY

Product Code: OC55
Product Name: Ortho-Cresol
Product Description: ortho-Cresol mixture
Product Type: Commercial Product
Recommended use: Chemical intermediate or solvent
Company: Everchem Fluids, LLC
1400 N. Providence Rd.,
Suite 302
Media, PA 19063
(484) 234-5030
Manufacturer: SABIC INNOVATIVE PLASTICS US LLC
1 Noryl Avenue
Selkirk, New York 12158
United States
Emergency Telephone Number: 800/447-4545 (Sabic)
Emergency Transportation/CHEMTREC (24 HOUR): 800 424-9300
Chemtrec Account No.: +1 703-527-3887 (globally, outside USA)
8079
E-mail: productinquiries@sabic-ip.com
Website Address: www.everchem.com



The additives in this product (if any) are bound in a thermoplastic resin matrix. In accordance with GHS for the classification of the product, the hazard potential may be assessed with respect to the physico-chemical form and/or bioavailability of the individual components in the thermoplastic resin.

Where GHS classifications are shown below, these are based on the individual components in the thermoplastic resin matrix. Under the typical use conditions for the resin, these hazardous components are unlikely to contribute to workplace exposure. Please read the entire safety data sheet and/or consult an EHS professional for a complete understanding.

Classification

OSHA Regulatory Status

This product is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Toxicity - Oral	Category 4
Acute Toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Gases)	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Flammable liquids	Category 4

GHS-Labeling

Emergency Overview

Warning

Hazard Statements

Harmful if swallowed
Harmful in contact with skin
Harmful if inhaled
Combustible liquid



Physical State: Liquid

Odor: Sweet, tarry-like

Precautionary Statements - Response

Specific measures (see .? on this label)
IF ON SKIN: Wash with plenty of soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)



Not applicable

Other Information

Not applicable

Other hazards which do not result in classification:

EVERCHEM FLUIDS Emergency Overview

- Light amber brown liquid with sweet, tarry-like odor
- Combustible liquid and vapor; can burn in a fire creating dense, toxic smoke
- CORROSIVE! causes burns to eyes, skin and respiratory tract
- Severe eye, skin, and mucous membrane irritant
- Toxic chemical; harmful if swallowed, inhaled, or absorbed through skin

Other Information:

No other information is available.

Processing Issues:

Processing vapors may cause irritation to the eyes, skin, and respiratory tract. In cases of severe exposure, nausea and headache can also occur. Grease-like processing vapor condensates on ventilation ductwork, molds, and other surfaces can cause irritation and injury to skin.

Aggravated Medical Conditions:

No information available



Product Type

Mixture

HAZARDOUS COMPONENTS:

Chemical Name	CAS Number	Weight %	GHS Classification (EC) No. 1272/2008 [CLP]:
o-Cresol	95-48-7	60 - 70	Acute Tox. 3 (H311) Acute Tox. 3 (H301) Skin Corr. 1B (H314) STOT SE 3 (H335) Aquatic Chronic 3 (H412)
Phenol	108-95-2	20 - 30	Muta. 2 (H341) Acute Tox. 3 (H311) Acute Tox. 3 (H311) Acute Tox. 3 (H301) STOT RE 2 (H373) Skin Corr. 1B (H314)
p-Cresol	106-44-5	5 - 10	Acute Tox. 3 (H311) Acute Tox. 3 (H301) Skin Corr. 1B (H314) STOT SE 3 (H335) Aquatic Chronic 3 (H412)
m-Cresol	108-39-4	5 - 10	Acute Tox. 3 (H311) Acute Tox. 3 (H301) Skin Corr. 1B (H314) STOT SE 3 (H335) Aquatic Chronic 3 (H412)
2,6-dimethyl-Phenol	576-26-1	1 - 5	Acute Tox. 3 (H311) Acute Tox. 3 (H301) Skin Corr. 1B (H314) Eye Damage 1 (H318) Aquatic Chronic 2 (H411)

The non-hazardous components and exact percentage (concentration) of the composition have been withheld as a trade secret.

This product consists primarily of high molecular weight polymers which are not expected to be hazardous. The ingredients in this product are present within the polymer matrix and are not expected to be hazardous.



4. FIRST AID MEASURES

On ingestion:	Call a physician or Poison Control Center immediately. Do not induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person.
If Inhalation:	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, begin CPR. Seek medical attention immediately.
On contact with eyes:	Immediately flush eyes with plenty of water for at least 15 minutes retracting eyelids often. This corrosive material can cause immediate and permanent eye damage. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention and monitor the eye daily as advised by your physician. After initial flushing, remove any contact lenses.
On skin contact:	Wash with soap and water under a drench shower. Remove contaminated clothing, launder immediately, and discard contaminated leather goods. Get medical attention immediately. For hot product, immediately immerse in or flush affected area with large amounts of cold water to dissipate heat. Cover with clean cotton sheeting or gauze and get prompt medical attention.

5. FIRE-FIGHTING MEASURES

Flash Point:	81°C (178°F) closed cup
Autoignition Temperature:	599°C
Explosive Limits	
upper:	Not determined
lower:	Not determined
Suitable Extinguishing Media:	Dry chemical, carbon dioxide (CO ₂), Alcohol-resistant foam.
Unsuitable Extinguishing Media for Safety Reasons:	Do not use a solid water stream as it may scatter and spread fire.
Hazards from Combustion Products:	Fire will produce dense black smoke containing hazardous combustion products, carbon oxides, hydrocarbon fragments.
Special Protective Equipment for Firefighters:	Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.
Specific Hazards:	Take precautionary measures against static discharges. When exposed to extreme heat (fire conditions) vapors/decomposition products may be released forming flammable/explosive mixtures in air. Closed containers may explode due to pressure build-up when exposed to extreme heat (fire conditions).



6. ACCIDENTAL RELEASE MEASURES

Clean up:

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Evacuate the area promptly.

Personal Precautions:

Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum.

Environmental Precautions:

Do not flush into surface water or sanitary sewer system. Material should not be released into the environment.

7. HANDLING AND STORAGE

Handling:

Keep away from heat and sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practices.

Storage:

Keep away from sources of ignition - No smoking. Store in closed container in a dry and cool area. Keep away from heat sources and sources of ignition.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

No components with information, unless noted below

Chemical Name	US OSHA PEL (8 Hr)	ACGIH	Canada - Alberta (8 Hr)	Germany (DFG) - MAK	Netherlands OEL - MAC	EVERCHEM FLUIDS Recommend (8
o-Cresol 95-48-7	FRL_TWA: 22 mg/m ³ , 5 ppm ; TL_PEL: 22 mg/m ³ , 5 ppm ; NOTE_TL: SKIN ; NOTE_FRL: SKIN	Inhalable fraction and vapor - TWA: 20 mg/m ³ ; Notations: Not Classifiable as a Human Carcinogen , Skin ; Crit Eff: Upper respiratory tract irritation	OEL_8 hr: 22 mg/m ³ , 5 ppm ; Substance interaction: SL_1	No information	No information	No Information
Phenol 108-95-2	FRL_TWA: 19 mg/m ³ , 5 ppm ; TL_PEL: 19 mg/m ³ , 5 ppm ; NOTE_TL: SKIN ; NOTE_FRL: SKIN	TWA: 5 ppm ; Notations: Not Classifiable as a Human Carcinogen , BEI , Skin ; Crit Eff: CNS impairment , Lung damage , Upper respiratory tract irritation	OEL_8 hr: 19 mg/m ³ , 5 ppm ; Substance interaction: SL_1	7.8MGM3	WNG_8: 8 mg/m ³ ; Notatie: Skin	No Information
p-Cresol 106-44-5	FRL_TWA: 22 mg/m ³ , 5 ppm ; TL_PEL: 22 mg/m ³ , 5 ppm ; NOTE_TL: SKIN ; NOTE_FRL: SKIN	Inhalable fraction and vapor - TWA: 20 mg/m ³ ; Notations: Not Classifiable as a Human Carcinogen , Skin ; Crit Eff: Upper respiratory tract irritation	OEL_8 hr: 22 mg/m ³ , 5 ppm ; Substance interaction: SL_1	No information	No information	No Information
m-Cresol 108-39-4	FRL_TWA: 22 mg/m ³ , 5 ppm ; TL_PEL: 22 mg/m ³ , 5 ppm ; NOTE_TL: SKIN ; NOTE_FRL: SKIN	Inhalable fraction and vapor - TWA: 20 mg/m ³ ; Notations: Not Classifiable as a Human Carcinogen , Skin ; Crit Eff: Upper respiratory tract irritation	OEL_8 hr: 22 mg/m ³ , 5 ppm ; Substance interaction: SL_1	No information	No information	No Information
2,6-dimethyl-Phenol 576-26-1	No Information	No Information	No Information	No information	No information	5 ppm TWA

*EVERCHEM FLUIDS Recommended Exposure Limits have been established for certain chemicals.

Engineering Measures to Exposure:

Use only in area provided with appropriate exhaust ventilation. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. In the case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hand Protection:

Solvent-resistant gloves

Eye Protection:

Safety glasses with side-shields or chemical goggles. If splashes are likely to occur, wear:.. complete head, face and neck protection.

Respiratory Protection:

In case of insufficient ventilation wear suitable respiratory equipment. Vapours are heavier than air and can cause suffocation by reducing oxygen available for breathing.



Body Protection:

Long sleeved clothing, impervious gloves, solvent-resistant apron, If splashes are likely to occur, wear, flame retardant protective clothing, solvent-resistant apron and boots.

Hygiene Measures:

When using, do not eat, drink or smoke. Wash hands and exposed areas before eating, drinking, smoking and when leaving work.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Color:	Light amber or brown
Odor:	Sweet, tarry-like
Boiling point/range:	193°C (380°F)
Melting point/range:	Not determined
Autoignition Temperature:	599°C
Flash Point:	81°C (178°F) closed cup
Vapor Pressure:	<1 at 20°C
Water Solubility:	Moderate, 50-99%
Evaporation Rate:	Negligible
Specific gravity:	>1; (water = 1)
Explosive Limits	
upper:	Not determined
lower:	Not determined

10. STABILITY AND REACTIVITY

Stability:	Stable under ambient conditions.
Conditions to Avoid:	Heat, flames and sparks. Keep away from open flames, hot surfaces and sources of ignition.
Materials to avoid:	Oxidizing agents, Strong acids and strong bases.
Hazardous Decomposition Products:	Intense heat and smoke, carbon oxides, hydrocarbons.



11. TOXICOLOGICAL INFORMATION

Acute Toxicity

LD50/oral/rat:	> 300 and < 2000 mg/kg
LD50/dermal/rabbit:	890 mg/kg
Other information on acute toxicity:	TDL0 Human 177 mg/kg Oral LD50 Mouse 861 mg/kg.

Subchronic Toxicity: o-Cresol: In 30-day inhalation studies in mink and ferrets, no mortalities occurred. Mink LC50 >2500 ppm and ferret LC50 >4500 ppm. In a 90-day feeding study in rats, treatment-related CNS depression was apparent at the high dose (600 mg/kg/day). A NOEL of 175 mg/kg/day was established. In a 90-day neurotoxicity study in rats, few treatment-related effects were observed. Increased mortality, decreased body weights and decreased food consumption occurred at the high dose (600 mg/kg/day).

Chronic Toxicity: Prolonged skin contact may defat the skin and produce dermatitis. Exposures can cause death from liver and kidney damage. Damage to internal organs has also been described following both lethal and non-lethal skin absorption. Chronic poisoning is characterized by systemic disorders such as digestive disturbances, including vomiting, difficulty swallowing, ptyalism, diarrhea, and anorexia; by nervous disorders, with headache, fainting, vertigo; and possibly by eruption on the skin. Prolonged cutaneous exposure to preparations of phenol may result in ochronosis.

Carcinogenicity:

IARC:	Not listed
OSHA:	Not regulated
NTP:	Not tested



Special Studies: Cresols: LDLo (Human) 177 mg/kg; Oral LD50 (Rat) 1454 mg/kg; Oral LD50 (Mouse) 861 mg/kg. Cresols contained in this product are corrosive and are severe skin, eye and mucous membrane irritants. They are toxic by ingestion and by skin absorption. They may cause skin sensitization. Cresols have been found to be mutagens in several assays. Overexposure may cause CNS depression, dermatitis, mild anemia and damage to the lungs, liver, kidneys and heart. Cresols have been shown to be experimental neoplastigens. Exposure to cresols in experimental animals has demonstrated slight developmental toxicity.

o-Cresol: In mutagenicity tests, o-cresol was non-mutagenic in the *Drosophila melanogaster* sex-linked recessive lethal test. o-Cresol induced chromosomal aberrations under conditions of both metabolic activation and nonactivation in the Chinese Hamster Ovary in vitro cytogenetics test. Negative in the in vivo dominant lethal assay in mice. Positive in root tip chromosome damage study. Inconclusive in in vitro transformation of BALB/C3T3 cells assay with rat liver activation system; o-cresol induced cytotoxicity but did not cause cell transformation. In developmental toxicity tests administered by oral gavage to rats and rabbits, o-cresol exhibited no teratogenicity or embryotoxicity; slight fetotoxicity was observed with high doses of o-cresol (450 mg/kg/day, rats; 100 mg/kg/day, rabbits) but only with concomitant maternal toxicity. Developmental toxicity NOEL's are 175 mg/kg/day, rats, and 50 mg/kg/day, rabbits. Two-generation reproduction toxicity tests administered by oral gavage to rats showed no treatment- related reproductive effects and no indications of increased risk to offspring in the absence of parental toxicity. The NOEL for parental males and females was 30 mg/kg/day and the NOEL for offspring was 175 mg/kg/day. In a 6-month reproductive study, o-cresol was not teratogenic at the high oral dose (1600 ppm).

Phenol: Carcinogenicity - In carcinogenicity bioassays conducted by the National Cancer Institute (NCI, 1980), B6C3F1 mice (50/sex/dose) and F344 rats (50/sex/dose) were administered phenol in drinking water at concentrations of 0, 2500 or 5000 ppm for 103 weeks. Dose-related decreases in weight gain in treated mice were attributed to decreased water consumption. No other clinical signs of toxicity were observed, and mortality rates were comparable between phenol treatment and control groups. Histopathological examination and statistical analyses revealed no phenol-related toxic or carcinogenic effects in mice. NCI concluded that, under these conditions, phenol was not carcinogenic in mice or rats.

Phenol: Genotoxicity - Phenol has tested both positive and negative for mutagenicity in a variety of in vitro and in vivo test systems. Overall, phenol is negative in standard Ames tests with and without metabolic activation. In mammalian cell assays in vitro, phenol is considered to be genotoxic. Positive results have been reported chromosome aberration studies in vitro and in vivo in non-standard studies (SCE, UDS, micronucleus assay).

Developmental Toxicology/Reproduction: Based on several developmental toxicity (teratology) studies and a single well conducted multigeneration reproduction study in rats, there is no evidence to suggest that phenol causes developmental or reproductive effects.

Target Organ Effects: Nervous System, Lungs, Kidneys, Liver, Pancreas, Spleen



12. ECOLOGICAL INFORMATION

Environmental Effects

Ecotoxicity Effects:

Do not flush into surface water or sanitary sewer system.

Environmental Fate

Biodegradation:

No data

13. DISPOSAL CONSIDERATIONS

Waste Disposal:

Spent or discarded material is a hazardous waste. Mixing spent or discarded material with other materials may render the mixture hazardous. Perform a hazardous waste determination on mixtures.

US EPA Waste number:

Potentially D023, F004, U052



14. TRANSPORT INFORMATION

Transport Classification:

Not regulated as hazardous for shipment, unless noted below, under current transportation guidelines.

DOT

Proper shipping name:

Cresylic acid

Packing group:

II

UN Number:

UN 2022

Reportable Quantity (RQ):

100 lb (45.4 kg) for Cresylic acid (isomers and mixture)

Hazard Class:

6.1 Toxic

DOT Subsidiary Class:

8 Corrosive

ADR/RID/ADN

Description:

Regulated. Consult latest edition of specific regulation per location and transportation mode.

IMDG

Description:

Regulated. Consult latest edition of specific regulation per location and transportation mode.

ICAO

Description:

Regulated. Consult latest edition of specific regulation per location and transportation mode.

IATA-DGR

Description:

Regulated. Consult latest edition of specific regulation per location and transportation mode.

MEXICO

Proper Shipping Name

Regulated. Consult latest edition of specific regulation per location and transportation mode.

CANADA/TDG



15. REGULATORY INFORMATION

International Inventories:

TSCA (USA):	Listed
DSL (Canada):	Listed
EINECS/ELINCS (Europe):	Listed
ENCS (Japan):	Listed
IECSC (China):	Listed
KECL (Korea):	Listed
PICCS (Philippines):	Listed
AICS (Australia):	Listed

REACH Information:

Other Inventory Information:

A "Listed" entry above means all chemical components are on the respective inventory list and/or a qualifying exemption exists for one or more components. A "Not listed" entry above indicates one or more components is restricted from import or manufacture into that country/region. Articles are exempt from registration and are therefore not listed on the national chemical inventories.

SVHC (REACH Regulation (EC) No 1907/2006 and 453/2010, as amended):

This product does not intentionally contain SVHC chemicals except as noted below. Incidental amounts of impurities, if present, would be below the threshold limit of 0.1% by weight.

SARA (313) Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

This product contains a chemical or chemicals that are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

Chemical Name	CAS Number	Weight %	CERCLA/SARA 313 de minimus:
o-Cresol	95-48-7	60 - 70	1.0
Phenol	108-95-2	20 - 30	1.0
m-Cresol	108-39-4	5 - 10	1.0
p-Cresol	106-44-5	5 - 10	1.0

SARA (311, 312) hazard class:

Acute Health Hazard	Y
Chronic Health Hazard	N
Fire Hazard	Y
Sudden Release of Pressure Hazard	N
Reactive Hazard	N

Canada - WHMIS Classification:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR. Unless noted below, this product is non-controlled. Some classifications may not apply to the entire product.

Chemical Name	Weight %	WHMIS hazard class:
Phenol 108-95-2	20 - 30	1%; English Item 1261; French Item 1374 D1A; E; B3; D2A

California Proposition 65:

This product does not contain components known to the State of California to cause cancer and/or reproductive effects.

RoHS EU Directive 2011/65/EU:

This product is in compliance with the EU RoHS Directive 2002/95/EC. The following are not intentionally added during the manufacture of this product: a - cadmium and its compounds, b - lead and its compounds, c - mercury and its compounds, d - hexavalent chromium compounds, e - polybrominated biphenyls (PBBs), f - polybrominated diphenyl ethers (PBDEs, including Deca-BDE).



HMIS Rating

Health: 4

Flammability: 2

Reactivity: 0

16. OTHER INFORMATION

SDS Scope: USA: Conforms to 29 CFR 1910.1200 (2012 OSHA Hazard Communication Standard)
This document is also applicable in other countries and regions.

Prepared by: Product Stewardship & Toxicology

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End of Safety Data Sheet