synerzine[™] Safety Data Sheet

o-Cresol

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 06/13/2015 Version: 1.0

SECTION 1: Identification

Identification

Product form : Substance Substance name o-Cresol CAS-No. 95-48-7 Product code : (US) W03500 Formula C7H80

2-Cresol / ortho-Cresol / Cresol, o- / Cresol, ortho- / o-Cresylic acid / 1-Hydroxy-2-methylbenzene Synonyms

/ 2-Hydroxytoluene / 2-Methylphenol / Phenol, 2-methyl- / O-CRESOL / Cresylic acid /

Methylphenol, 2- / Orthocresol

Recommended use and restrictions on use

No additional information available

1.3. Supplier

Synerzine 5340 Hwy 42 S Ellenwood, Georgia 30294 - USA T 404-524-6744 - F 404-577-1651 info@synerzine.com - www.synerzine.com

Emergency telephone number

: Infotrac 1-800-535-5053 (Contract# 102471) Dial +1-352-323-3500 when outside the US Emergency number

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

H318

H401

H411

GHS-US classification

Acute toxicity (oral) H301 Toxic if swallowed Category 3

Acute toxicity (dermal) H311

Category 3

Skin corrosion/irritation H314

Category 1B

Serious eye damage/eye irritation Category 1

Hazardous to the aquatic

environment - Acute Hazard

Category 2

Hazardous to the aquatic

environment - Chronic

Hazard Category 2

Full text of H statements: see section 16

Toxic in contact with skin

Causes severe skin burns and eye damage

Toxic to aquatic life with long lasting effects

Causes serious eye damage

Toxic to aquatic life

GHS Label elements, including precautionary statements

GHS-US labeling

Hazard pictograms (GHS-US)







Signal word (GHS-US) : Danger

: H301+H311 - Toxic if swallowed or in contact with skin Hazard statements (GHS-US)

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage H401 - Toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) : P260 - Do not breathe fume, mist, gas, spray, vapors.

> P264 - Wash hands, forearms and face thoroughly after handling. P270 - Do not eat, drink or smoke when using this product.

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P273 - Avoid release to the environment.

P280 - Wear eye protection, face protection, protective clothing, protective gloves.

P301+P310 - If swallowed: Immediately call a doctor, a POISON CENTER P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting

P302+P352 - If on skin: Wash with plenty of soap and water

P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin

with water/shower

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing

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 doctor, a POISON CENTER P312 - Call a doctor, a POISON CENTER if you feel unwell

P321 - Specific treatment (see supplemental first aid instructions on this label)

P330 - Rinse mouth.

P361 - Take off immediately all contaminated clothing.

P363 - Wash contaminated clothing before reuse.

P391 - Collect spillage. P405 - Store locked up.

P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Name	Product identifier	%	GHS-US classification
o-Cresol (Main constituent)	(CAS-No.) 95-48-7	98 - 100	Acute Tox. 3 (Oral), H301 Acute Tox. 3 (Dermal), H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Aquatic Acute 2, H401 Aquatic Chronic 2, H411

Full text of hazard classes and H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Call a

physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Call a physician immediately. Do not induce vomiting.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam.

5.2. Specific hazards arising from the chemical

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

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5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures

: Avoid contact with skin, eyes and clothing. Do not breathe fume, gas, mist, spray, vapors.

6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment

: Collect spillage.

Methods for cleaning up

Mechanically recover the product.

Other information

: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

: Ensure good ventilation of the work station. Do not get in eyes, on skin, or on clothing. We ar

personal protective equipment. Do not breathe fume, gas, mist, spray, vapors.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store locked up. Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

o-Cresol (95-48-7)		
ACGIH	ACGIH TWA (mg/m ³)	20 mg/m ³ (inhalable fraction and vapor)
IDLH	US IDLH (ppm)	250 ppm
NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m ³
NIOSH	NIOSH REL (TWA) (ppm)	2.3 ppm

8.2. Appropriate engineering controls

 $Appropriate\ engineering\ controls \\ \hspace{2cm} :\ Ensure\ good\ ventilation\ of\ the\ work\ station.$

Environmental exposure controls : Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Hand protection:

Protective gloves

Eye protection:

Safety glasses

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

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In case of insufficient ventilation, wear suitable respiratory equipment

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : A white powder.

Color : white Odor : phenolic

Odor threshold : No data available pH : No data available

Melting point : 31 °C

Not applicable Freezing point : 191 - 192 °C Boiling point Flash point : 177 °F TCC Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : Non flammable. Vapor pressure : 0.24 hPa (at 20 °C) Relative vapor density at 20 °C : No data available Relative density Not applicable

Specific gravity / density : $1.0465 \text{ g/cm}^3 (\text{at } 20 \text{ °C})$ Solubility : Water: 26 g/l (at 25 °C)

: 1.95 Log Pow Auto-ignition temperature : 598.89 °C Decomposition temperature : No data available Viscosity, kinematic : Not applicable Viscosity, dynamic No data available **Explosion limits** : Not applicable Explosive properties No data available Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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o-Cresol (95-48-7)	-Cresol (95-48-7)	
LD50 oral rat	121 mg/kg	
LD50 dermal rabbit	890 mg/kg	
LC50 inhalation rat (mg/l)	> 1220 mg/m³ (Exposure time: 1 h)	
ATE US (oral)	121 mg/kg body weight	
ATE US (dermal)	890 mg/kg body weight	

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

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified Specific target organ toxicity – single exposure : Not classified Specific target organ toxicity – repeated exposure : Not classified Aspiration hazard : Not classified

Symptoms/effects after skin contact : Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Burns.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects. Toxic to aquatic life.

o-Cresol (95-48-7)	
LC50 fish 1	9.72 - 15.92 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	9.5 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2 24 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)	
EC50 Daphnia 2	15.8 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

o-Cresol (95-48-7)	
Log Pow	1.95

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

o-Cresol (95-48-7)		
	1990 Hazardous Air Pollutant (Clean Air Act)	Yes

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional legislation (waste)

: U.S. - RCRA (Resource Conservation & Recovery Act) - Basis for Listing - Appendix VII. U.S. - RCRA (Resource Conservation & Recovery Act) - D Series Wastes - Max Conc of Contaminants for the Tox Characteristic. U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents. U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal

Constituents. U.S. - RCRA (Resource Conservation & Recovery Act) - Phase 4 LDR Rule - Universal Treatment Standards. U.S. - RCRA (Resource Conservation & Recovery Act) - TSD Facilities Ground

Water Monitoring.

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

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SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3455 Cresols, solid, 6.1, II

UN-No.(DOT) : UN3455
Proper Shipping Name (DOT) : Cresols, solid

Class (DOT) : 6.1 - Class 6.1 - Poisonous materials 49 CFR 173.132

Packing group (DOT) : II - Medium Danger
Hazard labels (DOT) : 6.1 - Poison
8 - Corrosive





Dangerous for the environment : Yes
Marine pollutant : Yes



DOT Packaging Non Bulk (49 CFR 173.xxx) : 212
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Special Provisions (49 CFR 172.102) : IB8

IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).

IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.

IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner.

T3 - 2.65 178.274(d)(2) Normal...... 178.275(d)(2)

TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx)

DOT Quantity Limitations Passenger aircraft/rail

(49 CFR 173.27)

: 153 : 15 kg

DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

: 50 kg

DOT Vessel Stowage Location

: D - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded.

DOT Vessel Stowage Other

: 40 - Stow "clear of living quarters",66 - Stow "separated from" flammable solids,74 - Stow "separated from" oxidizers,89 - Segregation same as for oxidizers,90 - Stow "separated from"

radioactive materials

Other information : No supplementary information available.

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Transportation of Dangerous Goods

Transport by sea

Transport document description (IMDG) : UN 3455 CRESOLS, SOLID, 6.1 (8), II

UN-No. (IMDG) : 3455

Proper Shipping Name (IMDG) : CRESOLS, SOLID

Class (IMDG) : 6.1 - Toxic substances

Packing group (IMDG) : II - substances presenting medium danger

Subsidiary risks (IMDG) : 8 - Corrosive substances

Limited quantities (IMDG) : 500 g

Marine pollutant : Yes



Air transport

Transport document description (IATA) : UN 3455 Cresols, solid, 6.1, II

UN-No. (IATA) : 3455

Proper Shipping Name (IATA) : Cresols, solid

Class (IATA) : 6.1 - Toxic Substances
Packing group (IATA) : II - Medium Danger
Subsidiary risks (IATA) : 8 - Corrosive substances

SECTION 15: Regulatory information

15.1. US Federal regulations

o-Cresol (95-48-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	100 lb
Section 302 EPCRA Reportable Quantity (RQ)	100 lb
SARA Section 302 Threshold Planning Quantity (TPQ)	1000 - 10000 lb

15.2. International regulations

CANADA

o-Cresol (95-48-7)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

o-Cresol (95-48-7)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National regulations

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o-Cresol (95-48-7)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Japanese Poisonous and Deleterious Substances Control Law

Japanese Pollutant Release and Transfer Register Law (PRTR Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on CICR (Turkish Inventory and Control of Chemicals)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

15.3. US State regulations

o-Cresol (95-48-7)	
State or local regulations U.S Massachusetts - Right To Know List	
	U.S New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) - Environmental Hazard List
	U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases:

text of 11-pin ases.		
H301	Toxic if swallowed	
H311	Toxic in contact with skin	
H314	Causes severe skin burns and eye damage	
H318	Causes serious eye damage	
H401	Toxic to aquatic life	
H411	Toxic to aquatic life with long lasting effects	

NFPA health hazard

: 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

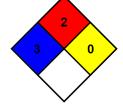
NFPA fire hazard

 $: \ 2 \text{-} \textit{Materials that must be moderately heated or exposed to} \\ \text{relatively high ambient temperatures before ignition can}$

occur.

NFPA reactivity

: 0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health

 $: \ \ 3 \, Serious \, Hazard \, \hbox{-}\, Major \, injury \, likely \, unless \, prompt \, action \, is \, taken \, and \, medical \, treatment \, is \, given \, .$

* - Chronic (long-term) health effects may result from repeated overexposure

Flammability

: 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)

Physical

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection

: G

G - Safety glasses, Gloves, Vapor respirator

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product

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