

SAFETY DATA SHEET

Cresylic Acid



Section 1. Identification

Product name	: Cresylic Acid
Product code	: CA630
Synonyms	: Not available.
Product type	: Liquid.
Company	: Everchem Specialty Chemicals 1400 N. Providence Rd. Media, PA 19063 484-234-5030
Emergency telephone number (with hours of operation)	: CHEMTREC, U.S. : (800) 424-9300 International: (703) 527-3887

Section 2. Hazards identification

OSHA/HCS status	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 3 ACUTE TOXICITY (inhalation) - Category 2 SKIN CORROSION/IRRITATION - Category 1B SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN SENSITIZATION - Category 1 GERM CELL MUTAGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 20%

GHS label elements

Hazard pictograms



Signal word

: Danger

Hazard statements

: Combustible liquid.
Fatal if inhaled.
Toxic if swallowed or in contact with skin.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
Suspected of causing genetic defects.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Prevention

: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye or face protection. Wear respiratory protection. Keep away from flames and hot surfaces. - No smoking. Use only outdoors or in a well-ventilated area. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace.

Section 2. Hazards identification

- Response** : Get medical attention if you feel unwell. IF exposed or concerned: Get medical attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF ON SKIN: Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
- Storage** : Store locked up. Store in a well-ventilated place. Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements** : Do not taste or swallow. Wash thoroughly after handling.
- Hazards not otherwise classified** : Causes digestive tract burns.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Not available.

CAS number/other identifiers

- CAS number** : Not applicable.
- Product code** : S-2365

Ingredient name	%	CAS number
phenol	10 - 30	108-95-2
2,6-xylenol	10 - 30	576-26-1
o-cresol	10 - 30	95-48-7
Methyl phenol	10 - 30	1319-77-3
2,3,6 trimethylphenol	0.3 - 1	2416-94-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Section 4. First aid measures

- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Fatal if inhaled. May cause respiratory irritation.
- Skin contact** : Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.
- Ingestion** : Toxic if swallowed. Corrosive to the digestive tract. Causes burns. May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

- : Use dry chemical, CO₂, water spray (fog) or foam.
- : Do not use water jet.

Unsuitable extinguishing media

Specific hazards arising from the chemical

- : Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products

- : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters

- : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

- : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

- : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill

- : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

- : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
phenol	<p>ACGIH TLV (United States, 4/2014). Absorbed through skin. TWA: 5 ppm 8 hours. TWA: 19 mg/m³ 8 hours.</p> <p>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin. TWA: 5 ppm 8 hours. TWA: 19 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2013). Absorbed through skin. TWA: 5 ppm 10 hours. TWA: 19 mg/m³ 10 hours. CEIL: 15,6 ppm 15 minutes. CEIL: 60 mg/m³ 15 minutes.</p> <p>OSHA PEL (United States, 2/2013). Absorbed through skin. TWA: 5 ppm 8 hours. TWA: 19 mg/m³ 8 hours.</p>
o-cresol	<p>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin. TWA: 5 ppm 8 hours. TWA: 22 mg/m³ 8 hours.</p> <p>NIOSH REL (United States, 10/2013). TWA: 2,3 ppm 10 hours. TWA: 10 mg/m³ 10 hours.</p> <p>ACGIH TLV (United States, 4/2014). Absorbed through skin.</p>

Section 8. Exposure controls/personal protection

TWA: 20 mg/m³ 8 hours. Form: Inhalable fraction and vapor
OSHA PEL (United States, 2/2013).
Absorbed through skin.
 TWA: 5 ppm 8 hours.
 TWA: 22 mg/m³ 8 hours.

- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Amber. or Brown. [Light]
- Odor** : Sweetish.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point** : Not available.
- Boiling point** : 193°C (379,4°F)

Section 9. Physical and chemical properties

Flash point	: Closed cup: 84°C (183,2°F)
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: <0,13 kPa (<1 mm Hg) [room temperature]
Vapor density	: Not available.
Density	: 1,05 g/cm ³ [20°C (68°F)]
Relative density	: Not available.
Solubility	: Partially soluble in the following materials: cold water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: 599°C (1110,2°F)
Decomposition temperature	: Not available.
Viscosity	: Not available.

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
phenol	LC50 Inhalation Vapor	Rat	316 mg/m ³	4 hours
	LD50 Dermal	Rabbit	630 mg/kg	-
	LD50 Dermal	Rat	669 mg/kg	-
o-cresol	LD50 Oral	Rat	317 mg/kg	-
	LD50 Dermal	Rabbit	1380 mg/kg	-
	LD50 Oral	Rat	121 mg/kg	-
	NOAEL Inhalation Dusts and mists	Rat	20 mg/l	6 hours
	NOAEL Inhalation Vapor	Rat	1,22 mg/l	1 hours

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
o-cresol	Skin - Edema	Rabbit	8	-	-
	Eyes - Edema of the conjunctivae	Rabbit	91,3	-	-

Sensitization

Section 11. Toxicological information

Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
o-cresol	- -	Subject: Bacteria Subject: Mammalian-Animal	Negative Negative

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
phenol	-	3	-

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
o-cresol	-	Negative	Negative	Rat	Oral: 175 mg/kg	-
	-	Negative	-	Rat	Gavage Oral: 450 mg/kg	-
	-	-	-	Rat	Gavage Oral: 30 mg/kg	-
	-	-	Negative	Rat	Gavage Oral: 50 mg/kg	-
	-	Negative	-	Rat	Gavage Oral: 263 mg/kg	-

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
o-cresol	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
phenol	Category 2	Not determined	Not determined

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Fatal if inhaled. May cause respiratory irritation.
- Skin contact** : Causes severe burns. Toxic in contact with skin. May cause an allergic skin reaction.
- Ingestion** : Toxic if swallowed. Corrosive to the digestive tract. Causes burns. May cause burns to mouth, throat and stomach.

Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
o-cresol	Chronic NOAEL Oral	Rat	50 mg/kg	13 weeks
	Chronic NOAEL Oral	Rat	3750 mg/kg	-
	Chronic NOAEL Oral	Mouse	1250 mg/kg	-

- General** : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : Suspected of causing genetic defects.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	131,5 mg/kg
Dermal	434,3 mg/kg
Inhalation (vapors)	1,59 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
phenol	Acute EC50 61,1 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 36 mg/l Marine water	Algae - Hormosira banksii - Gamete	72 hours
	Acute EC50 94 mg/l Fresh water	Aquatic plants - Lemna aquinoctiales	96 hours
	Acute EC50 4200 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1500000 µg/l Fresh water	Aquatic plants - Lemna minor	72 hours
	Acute LC50 800 µg/l Marine water	Crustaceans - Archaeomysis kokuboi - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
2,6-xylenol	Acute LC50 1,75 µg/l Fresh water	Fish - Cyprinus carpio - Larvae	96 hours
	Chronic NOEC 118 µg/l Fresh water	Fish - Oncorhynchus mykiss	90 days
	EC50 46,5 mg/l	Algae - Selenastrum capricornutum	72 hours
	NOEC 2,8 mg/l	Algae - Selenastrum capricornutum	72 hours
	Acute EC50 11 mg/l	Daphnia - Daphnia sp.	48 hours
	Acute EC50 4000 µg/l Marine water	Fish - Gadus morhua - Egg	96 hours
o-cresol	Acute LC50 2200 µg/l Marine water	Crustaceans - Artemia salina - LARVAE	48 hours
	Acute LC50 >27 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute NOEC 0,54 mg/l	Daphnia - Daphnia magna	21 days
	NOEC 6,8 mg/l	Algae - Microcystis aeruginosa	8 days
	NOEC 17 mg/l	Micro-organism - Entosiphon sulcatum	72 hours
	NOEC 33 mg/l	Micro-organism - Pseudomonas putida	16 hours
2,3,6 trimethylphenol	Acute EC50 9,6 mg/l	Daphnia - Daphnia pulex	48 hours
	Acute LC50 23000 µg/l Fresh water	Crustaceans - Asellus aquaticus	48 hours
	Acute LC50 5000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 6,2 mg/l	Fish - Salmo trutta	96 hours
	Acute LC50 8200 µg/l Fresh water	Fish - Pimephales promelas	96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
o-cresol	OECD 302B	95 % - 5 days	-	-
	302B Inherent Biodegradability: Zahn-Wellens/EMPA Test			
	OECD 301D	86 % - 20 days	-	-
	301D Ready Biodegradability - Closed Bottle Test			
o-cresol	OECD 301C	80 % - 40 days	100 mg/l	-
	301C Ready Biodegradability - Modified MITI Test (I) Anaerobic	10 % - 56 days	30 mg/l	-
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability	
2,6-xylenol	-	-	Inherent	
o-cresol	-	-	Readily	

Section 12. Ecological information

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
o-cresol	1,95	10,7	low
2,3,6 trimethylphenol	2,67	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.




Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Phenol	108-95-2	Listed	U188
Cresol	95-48-7	Listed	U052

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN2022	UN2022	UN2022
UN proper shipping name	Cresylic acid	CRESYLIC ACID	Cresylic acid
Transport hazard class(es)	6.1 (8) 	6.1 (8) 	6.1 (8) 
Packing group	II	II	II
Environmental hazards	No.	Yes.	No.
Additional information	Reportable quantity 500 lbs / 227 kg [57,111 gal / 216,19 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable)	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules (EmS) F-A, S-B	The environmentally hazardous substance mark may appear if required by other transportation regulations. Passenger and Cargo Aircraft Quantity limitation: 1 L Packaging instructions: 653

Section 14. Transport information

	quantity) transportation requirements. <u>Limited quantity</u> Yes. <u>Packaging instruction</u> Passenger aircraft Quantity limitation: 1 L Cargo aircraft Quantity limitation: 30 L <u>Special provisions</u> IB2, T7, TP2, TP13		Cargo Aircraft Only Quantity limitation: 30 L Packaging instructions: 660 <u>Limited Quantities -</u> Passenger Aircraft Quantity limitation: 0.5 L Packaging instructions: Y640
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Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
Clean Water Act (CWA) 307: Phenol
Clean Water Act (CWA) 311: Phenol; o-cresol; Xylenol

TSCA 8(b) inventory : Not determined.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
phenol	10 - 30	Yes.	500 / 10000	-	1000	-
o-cresol	10 - 30	Yes.	1000 / 10000	-	100	-

SARA 304 RQ : 500 lbs / 227 kg [57,1 gal / 216,2 L]

SARA 311/312

Classification : Fire hazard
 Immediate (acute) health hazard
 Delayed (chronic) health hazard

Section 15. Regulatory information

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
phenol	10 - 30	No.	No.	No.	Yes.	Yes.
2,6-xylenol	10 - 30	No.	No.	No.	Yes.	No.
o-cresol	10 - 30	No.	No.	No.	Yes.	No.
Methyl phenol	10 - 30	No.	No.	No.	Yes.	No.
2,3,6 trimethylphenol	0.3 - 1	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Phenol	108-95-2	10 - 30
	o-cresol	95-48-7	10 - 30
Supplier notification	Phenol	108-95-2	10 - 30
	o-cresol	95-48-7	10 - 30

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

- Massachusetts** : The following components are listed: PHENOL; O-CRESOL; XYLENOL
- New York** : The following components are listed: Phenol; Carboic acid; Cresol(s); Xylenol
- New Jersey** : The following components are listed: PHENOL; CARBOLIC ACID; o-CRESOL; 2-METHYL PHENOL; XYLENOL; PHENOL, DIMETHYL-
- Pennsylvania** : The following components are listed: PHENOL; PHENOL, 2-METHYL-; PHENOL, DIMETHYL-

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Inform Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

- Australia** : Not determined.
- Canada** : Not determined.
- China** : Not determined.
- Europe** : Not determined.
- Japan** : Not determined.
- New Zealand** : Not determined.
- Philippines** : Not determined.
- Republic of Korea** : Not determined.
- Taiwan** : Not determined.
- United States inventory (TSCA 8b)** : Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	3
Flammability		2
Physical hazards		0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

Date of printing : 20-5-2015.

Date of issue/Date of revision : 20-5-2015.

Date of previous issue : 20-5-2015.

Version : 1

Key to abbreviations

: ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 UN = United Nations

References : Not available.

☑ Indicates information that has changed from previously issued version.

Notice to reader

The information contained in the Safety Data Sheet is at the date of its issuance to the best of our knowledge correct according to the data available to us. The information is meant as a guideline for safe use, handling, disposal, storage and transport of products and does not imply any warranty (not implied nor explicitly) or specification. The Supplier shall to the extent permitted by law not be liable for any error or incorrectness in the information contained in this Safety Data Sheet. The information relates exclusively to the specified products, which may not be suitable for combination with other materials or use in processes other than those specifically described here.