SAFETY DATA SHEET

Product code: CR112
Product Name: CRESOL, CP

Other means of identification
Synonyms: Cresylic acid;
Methyl phenol:
Tricresol:
mixture of o-, m-, p- isomers

CAS #: 1319-77-3
RTECS #: GO5950000
Cl#: Not available

Recommended use of the chemical and restrictions on use
Recommended use: For making synthetic resins; in disinfectants and fumigants; as industrial solvent. In manufacture of tricresyl phosphate; ore flotation; textile scouring agent; organic intermediate, manufacture of salicylaldehyde, coumarin, herbicides and surfactant. Wide use in degreasing compound, paintbrush cleaners, & additives to lubricating oils. Cresol, as a mixture, is used as an ore flotation agent; as a disinfectant; and in the manufacture of synthetic resins, chemicals, dyes, and antioxidants..

Uses advised against No information available

Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000
Order Online At: https://www.spectrumchemical.com

Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

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

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity - Oral</td>
<td>Category 4</td>
</tr>
<tr>
<td>Acute toxicity - Dermal</td>
<td>Category 4</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Category 1Sub-category B</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Skin sensitization</td>
<td>Category 1</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>Category 3</td>
</tr>
<tr>
<td>Flammable liquids</td>
<td>Category 4</td>
</tr>
</tbody>
</table>

Label elements
Danger

Hazard statements
Harmful if swallowed
Harmful in contact with skin
Causes severe skin burns and eye damage
May cause an allergic skin reaction
May cause respiratory irritation
Combustible liquid

Hazard not otherwise classified (HNOC)
Not Applicable

Other hazards
Not available

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection
Do not breathe dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Use only outdoors or in a well-ventilated area
Keep away from heat/sparks/open flames/hot surfaces. — No smoking
Keep cool

Precautionary Statements - Response
Specific measures (see .? on this label)
Immediately call a POISON CENTER or doctor/physician
Specific treatment (see .? on this label)
In case of fire: Use CO2, dry chemical, or foam to extinguish.
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 doctor/physician.
Call a POISON CENTER or doctor/physician if you feel unwell
Wash contaminated clothing before reuse
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
If skin irritation or rash occurs: Get medical advice/attention
If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. 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
Do NOT induce vomiting
Precautionary Statements - Storage
Store locked up
Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Weight %</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cresol</td>
<td>1319-77-3</td>
<td>100</td>
<td>*</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First aid measures

General Advice: Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. First aider needs to protect himself.

Skin Contact: Wash off immediately with soap and plenty of water. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician immediately.

Eye Contact: Flush eye with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. WARNING! It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. Call a physician immediately.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed


Indication of any immediate medical attention and special treatment needed
Notes to Physician: Treat symptomatically

Protection of first-aiders
First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Product code: CR112 Product name: CRESOL, CP
5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Carbon dioxide (CO2). Dry chemical. Water spray mist or foam.

Unsuitable Extinguishing Media: A solid water stream may be inefficient.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon Monoxide. Carbon Dioxide

Specific hazards: Combustible material. May be ignited by heat, sparks or flames. Container explosion may occur under fire conditions or when heated.

Special Protective Actions for Firefighters

Specific Methods: Water mist may be used to cool closed containers. For larger fires, use water spray or fog. Cool containers with flooding quantities of water until well after fire is out. Dike fire-control water for later disposal; do not scatter the material.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment: Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth). In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up: Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions: Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.
Safe Handling Advice:
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not ingest. Do not breathe vapors or spray mist. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Hygroscopic. Protect from moisture. Protect from light. Sensitive to light. Store in light-resistant containers. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control parameters

National occupational exposure limits

**United States**

<table>
<thead>
<tr>
<th>Components</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WHEEL</th>
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<tbody>
<tr>
<td>Cresol - 1319-77-3</td>
<td>5 ppm TWA</td>
<td>None</td>
<td>20 mg/m³ TWA inhalable fraction and vapor</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>22 mg/m³ TWA</td>
<td></td>
<td></td>
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**Canada**

<table>
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<tr>
<th>Components</th>
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<th>British Columbia</th>
<th>Ontario</th>
<th>Quebec</th>
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<td>20 mg/m³ TWA inhalable fraction and vapor</td>
<td>5 ppm TWAEV</td>
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<td>22 mg/m³ TWA</td>
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**Australia and Mexico**

<table>
<thead>
<tr>
<th>Components</th>
<th>Australia</th>
<th>Mexico</th>
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<tbody>
<tr>
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Appropriate engineering controls

**Engineering measures to reduce exposure:**
Ensure adequate ventilation. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

**Individual protection measures, such as personal protective equipment**

**Personal Protective Equipment**

**Eye protection:**
Goggles. Face-shield.

**Skin and body protection:**
Chemical resistant protective suit. Gloves. boots.

**Respiratory protection:**
Vapor respirator. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:**
Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands and face before breaks and immediately after handling the product.

### 9. PHYSICAL AND CHEMICAL PROPERTIES
9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state:** Liquid.

**Odor:** Phenolic. Sweet, tarry.

**Formula:** C7H8O

**Flash Point Tested according to:** Closed cup

**Autoignition Temperature (°C/°F):** 599°C/1110.2°F

**Boiling point/range(°C/°F):** 191-203°C/375-397.4°F

**Specific gravity:**
- 1.034 @ 20°C
- 1.030-1.038 @ 25°C

**Evaporation rate:** No information available

**Odor threshold (ppm):** No information available

**Miscibility:**
- Miscible in Chloroform
- Miscible with alcohol
- Miscible with Ether
- Miscible with Benzene
- Miscible with Petroleum Ether
- Miscible with Glycerol

**Solubility:**
- Soluble in about 50 parts water
- Soluble in Vegetable oils

**Molecular/Formula weight:** 108.14

**Formula:** C7H8O

**Color:** Colorless to pale yellow.

**Odor:** Phenolic. Sweet, tarry.

**Taste:** Pungent.

**Miscibility:**
- Miscible in Chloroform
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10. STABILITY AND REACTIVITY

**Reactivity**
- Reactive with oxidizing agents
- Reactive with acids
- Reacts with bases

**Chemical stability**

**Stability:**

**Possibility of Hazardous Reactions:**
- Hazardous polymerization does not occur

**Conditions to avoid:**

**Incompatible Materials:**

**Hazardous decomposition products:**
- No information available

**Other Information**
11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation. Skin.

Acute Toxicity

Component Information

Cresol - 1319-77-3
  LD50/oral/rat = 1454 mg/kg Oral LD50 Rat
  LD50/oral/mouse = 760-860 mg/kg
  LD50/dermal/rabbit = 2000 mg/kg Dermal LD50 Rabbit
  LD50/dermal/rat = = 242 mg/kg Dermal LD50 Rat
  LC50/inhalation/rat = No information available
  LC50/inhalation/mouse = No information available
  Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat =
VALUE- Acute Tox Oral = 1454mg/kg

LD50/oral/mouse =
Value - Acute Tox Oral = 760mg/kg

LD50/dermal/rabbit
VALUE-Acute Tox Dermal = 2000mg/kg

LD50/dermal/rat
VALUE - Acute Tox Dermal = 242mg/kg

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms
Skin Contact:
Harmful in contact with skin. Causes severe irritation and burns. Skin contact with cresols has resulted in skin blanching, skin peeling, burning sensation, erythema, localized anesthesia (numbness), and occasionally, ochronosis, a darkening of the skin. It is also absorbed through the skin. When absorbed through the skin it can cause somnolence and tetany and produce systemic effects such as peripheral neuritis, damage to internal organs, including loss of kidney function and necrosis of the liver and kidneys. Serious or even fatal poisoning may result if large areas of the skin are wet with cresol and it is not removed immediately. Hypersensitivity may also occur.

Eye Contact:
Severe eye irritation. Causes eye burns.

Inhalation
Irritating to respiratory system. It is extremely destructive to the tissue of the mucous membrane and upper respiratory tract. Inhalation may result in spasm, inflammation, and edema of the larynx and bronchi, chemical pneumonitis, and pulmonary edema. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, and nausea.

Ingestion
Harmful if swallowed. Irritating to mouth, throat, and stomach. Corrosive to the mouth, throat, and stomach. Causes digestive or gastrointestinal tract burns. Can cause burning pain in mouth and throat. White necrotic lesions in mouth, esophagus, and stomach, abdominal pain, peritonitis, nausea, vomiting, bloody diarrhea, dyspnea, pallor, sweating, central nervous system disturbances (somnolence, convulsions, headache, dizziness), tinnitus. Acute ingestion may lead to shock with cardiovascular disturbances (weak irregular pulse, tachycardia, hypotension), shallow respirations, cyanosis, pallor, profound fall in body temperature, possible fleeting excitement and confusion followed by unconsciousness. Other symptoms of acute ingestion may include stentorous breathing, mucous rales, rhonchi, frothing at nose and mouth and other signs of pulmonary edema, characteristic odor of phenol on the breath, impairment of kidney function (renal necrosis, nephritis, acute renal failure with scanty, dark-colored urine (oliguria, anuria), hematuria), moderately severe renal insufficiency), impairment of liver function, Methemoglobinemia, Heinz body hemolytic anemia, hyperbilirubinemia. Death from respiratory, circulatory or cardiac failure may occur.

Aspiration hazard
No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity
Prolonged or repeated exposure by ingestion, skin absorption, or inhalation may cause kidney and liver damage, weight loss and may also affect the skin, gastrointestinal tract, lungs, and central nervous system/nervous system. Symptoms may include vertigo, fainting, fatigue, insomnia, nervousness, tremors, mental disturbances, headache, cough, muscle aches and pain, difficulty swallowing, excess salivation, diarrhea, nausea, vomiting, lack of appetite or anorexia, pallor, partial paralysis, ochronosis, albuminuria, and dark urine, hepatitis, fatty liver degeneration. Prolonged skin contact may cause allergic dermatitis.

Sensitization:
May cause sensitization by skin contact

Mutagenic Effects:
No information available

Carcinogenic effects:
Not classifiable as a human carcinogen.

<table>
<thead>
<tr>
<th>Components</th>
<th>ACGIH - Carcinogens</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cresol</td>
<td>A4 Not Classifiable as a Human Carcinogen</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

Product code: CR112
Product name: CRESOL, CP
Reproductive toxicity: No data is available.

Reproductive Effects: No information on reproductive toxicity effects on humans was found. Reproductive effects of cresols administered to rats and mice in diet were limited to mild to moderate uterine atrophy and lengthening of estrus cycle at the highest dose levels tested (>2000 mg/kg/day). No adverse effects on sperm motility or concentration were observed.

Developmental Effects: No information on developmental toxicity effects on humans was found. Developmental studies that treated rats and rabbits by oral gavage during gestation observed fetal effects (skeletal variations and delayed ossification) at dose levels that also cause maternal toxicity.

Teratogenic Effects: No information available.

Specific Target Organ Toxicity

STOT - single exposure: lungs, respiratory system.
STOT - repeated exposure: May cause damage to organs through prolonged or repeated exposure.
Target Organs: Central nervous system, Liver, Kidneys, Lungs, Respiratory system, Skin, Eyes.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Aquatic environment.

Cresol - 1319-77-3
Freshwater Fish Species Data: 10 mg/L LC50 Lepomis macrochirus 96 h static 1
12.8 mg/L LC50 Pimephales promelas 96 h flow-through 1

Persistence and degradability: Readily biodegradable

Bioaccumulative potential: Potential for bioconcentration in aquatic organisms is low.

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products: Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging: Empty containers should be taken for local recycling, recovery or waste disposal.

<table>
<thead>
<tr>
<th></th>
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Product code: CR112
Product name: CRESOL, CP
14. TRANSPORT INFORMATION

**DOT**
- **UN-No:** UN2076
- **Proper Shipping Name:** Cresols, liquid
- **Hazard Class:** 6.1
- **Subsidiary Risk:** 8
- **Packing Group:** II
- **ERG No:** 153
- **Marine Pollutant:** No data available
- **DOT RQ (lbs):** No information available

**TDG (Canada)**
- **UN-No:** UN2076
- **Proper Shipping Name:** Cresols, liquid
- **Hazard Class:** 6.1
- **Subsidiary Risk:** (8)
- **Packing Group:** II
- **Description:** No information available

**ADR**
- **UN-No:** UN2076
- **Proper Shipping Name:** Cresols, liquid
- **Hazard Class:** 6.1
- **Packing Group:** II
- **Subsidiary Risk:** 8
- **Classification Code:** No information available
- **Description:** No information available
- **CEFIC Tremcard No:** No information available

**IMO / IMDG**
- **UN-No:** UN2076
- **Proper Shipping Name:** Cresols, liquid
- **Hazard Class:** 6.1
- **Subsidiary Risk:** 8
- **Packing Group:** II
- **Description:** No information available
- **IMDG Page:** No information available
- **Marine Pollutant:** No information available
- **EMS:** F-A
- **MFAG:** No information available
- **Maximum Quantity:** No information available

**RID**
- **UN-No:** UN2076
- **Proper Shipping Name:** Cresols, liquid
- **Hazard Class:** 6.1
- **Subsidiary Risk:** 8
- **Packing Group:** II
- **Classification Code:** No information available
- **Description:** No information available

**ICAO**
- **UN-No:** UN2076
- **Proper Shipping Name:** Cresols, liquid
- **Hazard Class:** 6.1
- **Subsidiary Risk:** 8

**Product code:** CR112  **Product name:** CRESOL, CP
14. TRANSPORT INFORMATION

Packing Group: II
Description: No information available

IATA
UN-No: UN2076
Proper Shipping Name: Cresols, liquid
Hazard Class: 6.1
Subsidiary Risk: 8
Packing Group: II
ERG Code: 6C
Description: No information available

15. REGULATORY INFORMATION

International Inventories

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<th>Components</th>
<th>U.S. TSCA</th>
<th>KOREA KECL (PICCS)</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>CHINA</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
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</thead>
</table>

U.S. Regulations

Cresol
- Massachusetts RTK: Present
- New Jersey RTK Hazardous Substance List: Present
- New Jersey (EHS) List: Present
- New Jersey - Discharge Prevention - List of Hazardous Substances: Present
- Pennsylvania RTK: Environmental hazard
- Pennsylvania RTK - Environmental Hazard List: Present
- RI RTK - Hazardous Substances List: Present
- Minnesota - Hazardous Substance List: Present
- New York Release Reporting - List of Hazardous Substances:
  - 1000 lb RQ
  - 1 lb RQ
- Louisiana Reportable Quantity List for Pollutants: Present 100lbfinal RQ 45.4kgfinal RQ
- California Directors List of Hazardous Substances: Present


Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Components</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cresol</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

CERCLA/SARA

<table>
<thead>
<tr>
<th>Components</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cresol</td>
<td>100 lb final RQ 45.4 kg final RQ</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>1.0 % de minimis concentration</td>
</tr>
</tbody>
</table>

U.S. TSCA

Product code: CR112
Product name: CRESOL, CP
Components TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)

<table>
<thead>
<tr>
<th>Components</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) -Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cresol</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Canada

WHMIS hazard class:
- B3 Combustible liquid
- D1A Very toxic materials
- E Corrosive material

Cresol
- B3 D1A E

Canada Controlled Products Regulation:
This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

<table>
<thead>
<tr>
<th>Components</th>
<th>WHMIS Ingredient Disclosure List -</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cresol</td>
<td>1 %</td>
</tr>
</tbody>
</table>

EU Classification

R-phrase(s)
- R34 - Causes burns.
- R24/25 - Toxic in contact with skin and if swallowed.

S -phrase(s)
- S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
- S 1/2 - Keep locked up and out of the reach of children.
- S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

<table>
<thead>
<tr>
<th>Components</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cresol</td>
<td>T; R24/25</td>
<td>No information</td>
<td>S1/2 S36/37/39 S45</td>
</tr>
<tr>
<td></td>
<td>C; R34</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:
- T - Toxic
- C - Corrosive.

Product code: CR112
Product name: CRESOL, CP
16. OTHER INFORMATION

Preparation Date: 3/31/2015
Revision Date: 3/31/2015
Prepared by: Sonia Owen

Disclaimer: All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet