1. Product and Company Identification

Product Name: PREVENTOL CMK 40
Material Number: 141562
Chemical Family: Preparation containing 4-Chloro-3-methylphenol, sodium salt

2. Hazards Identification

Emergency Overview

Corrosive. Water runoff from fire fighting may be corrosive. Irritating gases/fumes may be given off during burning or thermal decomposition. Causes respiratory tract burns. Causes skin burns. May cause allergic skin reaction. Causes eye burns. Causes digestive tract burns. May be harmful if swallowed.

Potential Health Effects

Primary Routes of Entry: Skin Contact, Eye Contact, Ingestion, Inhalation
Medical Conditions Aggravated by Exposure: Skin disorders, Respiratory disorders, Eye disorders

HUMAN EFFECTS AND SYMPTOMS OF OVEREXPOSURE

Inhalation
Acute Inhalation
For Component: 4-Chloro-3-methylphenol, Sodium Salt
Corrosive with symptoms of coughing, burning, ulceration, and pain. Overexposure to vapor may produce dizziness, drowsiness, or nausea.

Skin
Acute Skin
For Component: 4-Chloro-3-methylphenol, Sodium Salt
Corrosive with symptoms of reddening, itching, swelling, burning and possible permanent damage.

**Eye**

**Acute Eye**

**For Component: 4-Chloro-3-methylphenol, Sodium Salt**

Corrosive with symptoms of reddening, tearing, swelling, burning and possible permanent damage. May cause corneal injury.

**Ingestion**

**Acute Ingestion**

**For Component: 4-Chloro-3-methylphenol, Sodium Salt**

May be harmful if swallowed. Symptoms of ingestion may include abdominal pain, nausea, vomiting, and diarrhea. May cause digestive tract burns.

**General Effects of Exposure**

**Chronic Effects of Exposure**

**For Product: PREVENTOL CMK 40**

No applicable information was found concerning any adverse chronic health effects from overexposure to this product.

**Carcinogenicity:**

No Carcinogenic substances as defined by IARC, NTP and/or OSHA.

### 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Weight %</th>
<th>Components</th>
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</tr>
</thead>
<tbody>
<tr>
<td>40 - 50%</td>
<td>4-Chloro-3-methylphenol, Sodium Salt</td>
<td>15733-22-9</td>
</tr>
</tbody>
</table>

### 4. First Aid Measures

**Eye Contact**

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Remove contact lenses. Call a physician immediately.

**Skin Contact**

Wash off immediately with plenty of water for at least 15 minutes. Wash off with polyethylene glycol and afterwards with plenty of water. Immediately remove contaminated clothing and shoes. Call a physician immediately. Wash clothing and shoes before reuse.

**Inhalation**

If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration using a pocket mask type resuscitator. Call a physician immediately.

**Ingestion**

Do not induce vomiting. If conscious, give 2 glasses of water. Get immediate medical attention. Activated charcoal is recommended.
5. Fire-Fighting Measures

Suitable Extinguishing Media: All extinguishing media are suitable.

Special Fire Fighting Procedures
Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes. Use cold water spray to cool fire-exposed containers to minimize risk of rupture.

Unusual Fire/Explosion Hazards
Water runoff from fire fighting may be corrosive. Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

6. Accidental release measures

Spill and Leak Procedures
Cleanup personnel must use appropriate personal protective equipment. Cover spill with inert material (e. g., dry sand or earth) and collect for proper disposal. Wash spill area with soap and water. Do not allow spilled material or wash water to enter sewers, surface waters, or groundwater systems.

7. Handling and Storage

Storage Period
Not Established

Handling/Storage Precautions
Do not breathe vapours or spray mist. Do not get on skin or clothing. Do not get in eyes. Do not taste or swallow. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Keep container closed when not in use. Store separate from food products.

Further Info on Storage Conditions
Protect from freezing.

8. Exposure Controls / Personal Protection

Country specific exposure limits have not been established or are not applicable

Industrial Hygiene/Ventilation Measures
General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines.

Respiratory Protection
In case of insufficient ventilation wear suitable respiratory equipment. A NIOSH approved air purifying respirator with organic vapor cartridges and particulate prefilter can be used to minimize exposure.

Hand Protection
rubber gloves, Polyvinyl chloride (PVC/vinyl) gloves. Do not reuse contaminated gloves.

Eye Protection
splash proof goggles., face-shield.
Skin and body protection
Permeation resistant clothing and foot protection.

Additional Protective Measures
Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Emergency showers and eye wash stations should be available.

9. Physical and chemical properties

Form: Liquid
Color: Brown
Odor: Slight, Phenolic
pH: Approximately 11.6 @ 100 g/l 20 °C (68 °F)
Boiling Point/Range: Approximately 97 °C (206.6 °F)
Flash Point: 112 °C (233.6 °F) (DIN 51758)
Vapor Pressure: Not Established
Density: approximately 1.212 g/cm3 @ 20 °C (68 °F)
Specific Gravity: Approximately 1.212 @ 20 °C (68 °F)
Solubility in Water: Soluble
Autoignition Temperature: 600 °C (1,112 °F)
Decomposition Temperature: Not established

10. Stability and Reactivity

Hazardous Reactions
Hazardous polymerization does not occur.

Stability
Stable

Materials to avoid
Oxidizing agents, Reducing agents

Conditions to avoid
None known.

Hazardous decomposition products
By Thermal Decomposition: Hydrochloric Acid; Carbon monoxide, Carbon oxides, other potentially toxic fumes

11. Toxicological Information

Toxicity Data for PREVENTOL CMK 40

Acute Oral Toxicity
LD50: 1,414 mg/kg (rat, female)
LD50: > 2,000 mg/kg (rat, male)

Acute Inhalation Toxicity
LC50: > 7550 mg/m3, aerosol, 4 h (rat)
Acute dermal toxicity
LD50: > 2,000 mg/kg (rat)

Sensitization
non-sensitizer (guinea pig, Buehler)
sensitizer (guinea pig, Patch Test)

Toxicity Data for 4-Chloro-3-methylphenol, Sodium Salt
Acute Oral Toxicity
LD50: 1,360 - 1,610 mg/kg (Rat, Male/Female)

Skin Irritation
rabbit, Corrosive

Eye Irritation
rabbit, Corrosive

Toxicity Data for Propylene glycol
Acute Oral Toxicity
LD50: > 5,000 mg/kg (rat)

Acute dermal toxicity
LD50: > 5,000 mg/kg (rabbit)

Skin Irritation
rabbit, OECD Guideline for Testing of Chemicals, No. 404, No skin irritation

Eye Irritation
rabbit, OECD Guideline for Testing of Chemicals, No. 405, No eye irritation
Human, Slightly irritating

Sensitization
dermal: non-sensitizer (Human)
non-sensitizer (mouse, Mouse ear swelling test)

Repeated Dose Toxicity
90 Days, Inhalation: NOAEL: 1 mg/l, (rat, Male/Female, 6 hrs/day 5 days/week)
2 years, Oral: NOAEL: 2,000 mg/kg, (dog, Male/Female, daily)
2 years, Oral: NOAEL: 50000 ppm, (rat, Male/Female, daily)

Mutagenicity
Genetic Toxicity in Vitro:
Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without)
Positive and negative results were seen in various in vitro studies.
Genetic Toxicity in Vivo:
Dominant Lethal Assay: negative (rat, Male/Female, oral)
Other assay: negative, Negative results were reported in various in vivo studies. (mouse, )

Carcinogenicity
rat, female, dermal, 14 months,
negative
dog, Male/Female, oral, 2 years, daily
negative
rat, Male/Female, oral, 2 years, daily
negative

Toxicity to Reproduction/Fertility
Fertility Screening, oral, daily, (rat, Male/Female) NOAEL (parental): 7.5 % in feed, Reproductive effects have been observed in animal studies.

**Developmental Toxicity/Teratogenicity**  
rabbit, female, oral, gestation, daily, NOAEL (teratogenicity): 1,230 mg/kg, NOAEL (maternal): 1,230 mg/kg.  
No Teratogenic effects observed at doses tested.  
rat, female, oral, gestation, daily, NOAEL (teratogenicity): 1,600 mg/kg, NOAEL (maternal): 1,600 mg/kg.  
No Teratogenic effects observed at doses tested.

### 12. Ecological Information

**Ecological Data for PREVENTOL CMK 40**

**Biodegradation**  
Readily biodegradable.

**Acute and Prolonged Toxicity to Fish**  
LC50: Approximately 5.7 mg/l (Zebra fish (Brachydanio rerio), 48 h)

**Toxicity to Microorganisms**  
NOEC: Approximately 125 mg/l, (Pseudomonas putida)

**Ecological Data for 4-Chloro-3-methylphenol, Sodium Salt**

**Biodegradation**  
90 %, Readily biodegradable.

**Acute and Prolonged Toxicity to Fish**  
LC50: 5.7 mg/l (Zebra fish (Brachydanio rerio), 48 h)

**Ecological Data for Propylene glycol**

**Biodegradation**  
Aerobic, 100 %, Exposure time: 1 Days  
Anaerobic, 100 %, Exposure time: 9 Days

**Biological Oxygen Demand (BOD)**  
5 Days, 1,170 mg/l

**Chemical Oxygen Demand (COD)**  
2,600 mg/g

**Theoretical Biological Oxygen Demand (ThBOD)**  
0.45 mg/g

**Bioaccumulation**  
< 1 BCF  
Calculated value

**Acute and Prolonged Toxicity to Fish**  
LC50: 51,400 mg/l (Fathead minnow (Pimephales promelas), 96 hrs)  
LC50: 23,800 mg/l (Sheepshead minnow (Cyprinodon variegatus), 96 hrs)

**Acute Toxicity to Aquatic Invertebrates**  
EC50: > 10,000 mg/l (Water flea (Daphnia magna), 48 hrs)
Toxicity to Aquatic Plants
EC50: 19,000 mg/l, End Point: growth (Green algae (Selenastrum capricornutum), 96 hrs)

Toxicity to Microorganisms
EC50: 25,800 mg/l, (Photobacterium phosphoreum, 30 min)
> 1,000 mg/l, (Activated sludge microorganisms, 3 hrs)

13. Disposal considerations

Waste Disposal Method
Waste disposal should be in accordance with existing federal, state, provincial, and/or local environmental control laws.

Empty Container Precautions
Recondition or dispose of empty container in accordance with governmental regulations. Do not reuse empty container without proper cleaning. Label precautions also apply to this container when empty.

14. Transportation information

Land transport (DOT)
Proper Shipping Name: Corrosive liquids, n.o.s. (contains 4-Chloro-3-methylphenol, Sodium Salt)
Hazard Class or Division: 8
UN/NA Number: UN1760
Packaging Group: II
Hazard Label(s): Corrosive

Sea transport (IMDG)
Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (contains 4-Chloro-3-methylphenol, Sodium Salt)
Hazard Class or Division: 8
UN-No: UN1760
Packaging Group: II
Hazard Label(s): Corrosive

Air transport (ICAO/IATA)
Proper Shipping Name: Corrosive liquid, n.o.s. (contains 4-Chloro-3-methylphenol, Sodium Salt)
Hazard Class or Division: 8
UN-No: UN1760
Packaging Group: II
Hazard Label(s): Corrosive

15. Regulatory Information

United States Federal Regulations
OSHA Hazcom Standard Rating: Hazardous
US. Toxic Substances Control Act: Not listed on TSCA Inventory, for R&D Use Only, Section 5 (h)(3) limitations apply.

US. EPA CERCLA Hazardous Substances (40 CFR 302):
Components
None

SARA Section 311/312 Hazard Categories:
Acute Health Hazard

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A):
Components
None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required:
Components
None

If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste. (40 CFR 261.20-24)

State Right-To-Know Information
The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:
<table>
<thead>
<tr>
<th>Weight %</th>
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<td>15733-22-9</td>
</tr>
<tr>
<td>&gt;=1%</td>
<td>Water</td>
<td>7732-18-5</td>
</tr>
<tr>
<td>&gt;=1%</td>
<td>Propylene glycol</td>
<td>57-55-6</td>
</tr>
</tbody>
</table>

New Jersey Environmental Hazardous Substances List and/or New Jersey RTK Special Hazardous Substances Lists:
<table>
<thead>
<tr>
<th>Weight %</th>
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<th>CAS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2%</td>
<td>Sodium hydroxide</td>
<td>1310-73-2</td>
</tr>
</tbody>
</table>

California Prop. 65:
To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

16. Other Information

NFPA 704M Rating
Health 3
| Flammability | 1 |
| Reactivity   | 0 |
| Other        |   |

0=Insignificant 1=Slight 2=Moderate 3=High 4=Extreme

HMIS Rating

| Health | 3 |
| Flammability | 1 |
| Physical Hazard | 0 |

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

* = Chronic Health Hazard

LANXESS Corporation's method of hazard communication is comprised of Product Labels and Material Safety Data Sheets. HMIS and NFPA ratings are provided by LANXESS Corporation as a customer service.

Contact Person: Product Safety Department
Telephone: (800) LANXESS
MSDS Number: 000000007212
Version Date: 09/18/2007
Report Version: 1.4

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