

# 4-Chloro-3-methylphenol

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This document provides a brief description of 4-Chloro-3-methylphenol, its uses, and the potential hazards associated with short and long term exposure. Environmental impact information for accidental releases is included. This information is general in nature and is not intended as a replacement for the safety data sheet (SDS), product label and other safe handling literature. For additional information consult the LANXESS safety data sheet.

## Identification

<b>Product Name:</b>	4-Chloro-3-methylphenol
<b>Chemical Name:</b>	4-Chloro-3-methylphenol
<b>Synonym(s):</b>	p-Chloro-m-Cresol PCMC
<b>CAS Number:</b>	59-50-7

## Description

**Overview:** 4-Chloro-3-methylphenol is a colorless to white solid at ambient temperatures although yellowing occurs with exposure to light and air. The chemical compound is sold in a crystalline pellet form and has a slight, phenolic odor.

**Uses:** 4-Chloro-3-Methylphenol is used in industry as a topical antiseptic, disinfectant or preservative. LANXESS's 4-Chloro-3-methylphenol is used as a preservative in the production of glues and adhesives, joint cements, plastics, dyes, pigments, paints and coatings, papers, textile products, metalworking fluids, cutting oils and other products.

**Properties:**

<b>Melting Point:</b>	145.4-149°F (63-65°C)
<b>Boiling Point:</b>	Approx. 462°F (239°C)
<b>Flash Point:</b>	Approx. 244°F (118°C)
<b>Solubility in Water</b>	Slight

## **Potential Human Health Effects**

### **Occupational Exposure**

Potential for occupational exposure exists through inhalation, skin or eye contact during the manufacture of 4-Chloro-3-methylphenol and at transloading, storage and staging areas. A much lower potential for exposure exists in facilities using the chemical as an ingredient in the manufacture of other products, since the majority of 4-Chloro-3-methylphenol sold by LANXESS is used in closed manufacturing processes by trained personnel.

### **Employee Training**

Workers handling 4-Chloro-3-methylphenol are trained to implement proper handling procedures and to understand the potential health and physical hazards of this product. A NIOSH approved air-purifying particulate respirator is recommended for transloading, unloading and other operations not contained within a closed system. In addition, LANXESS recommends that goggles, permeation resistant clothing, gloves and foot protection be worn when handling 4-Chloro-3-methylphenol. Workers handling hot material should wear heat resistant gloves and clothing.

### **Consumer Exposure**

LANXESS does not sell 4-Chloro-3-methylphenol directly to the general public. Consumers may be exposed to trace amounts of 4-Chloro-3-methylphenol through use of products that include the chemical compound as an ingredient.

### **Short-Term Health Effects**

4-Chloro-3-methylphenol is corrosive and may be toxic if inhaled in sufficient quantities. Symptoms of inhalation exposure include coughing, burning, ulceration and pain. Overexposure to vapors may produce dizziness, drowsiness or nausea. Short-term skin or eye contact may result in redness, itching, swelling or burning in the affected area with permanent tissue damage possible. An allergic skin reaction may occur in susceptible individuals with symptoms of redness, itching, swelling and rash. The effects of contact or inhalation may be delayed.

Swallowing 4-Chloro-3-methylphenol may induce abdominal pain, nausea, vomiting and diarrhea. Ingesting sufficient quantities of the chemical may result in corrosive damage to the digestive tract with symptoms of burning and ulceration. Nervous system effects may include dizziness, lack of coordination, sweating, headache, numbness and/or confusion.

### **Long-Term Health Effects**

Repeated or prolonged exposure may cause effects as noted under Short-Term Health Effects.

## **Physical Hazards**

4-Chloro-3-methylphenol is corrosive to metals. Dust on elevated surfaces may create a dust cloud explosion hazard. Thermal decomposition releases hydrochloric acid and carbon oxides. Exposure to heat, open flames and other potential sources of ignition must be avoided.

## **Potential Environmental Impact**

4-Chloro-3-methylphenol is biodegradable and is not expected to adsorb into soils or sediments. Accidental release through spills may pose a danger to fish (high toxicity), invertebrates (moderate toxicity) and aquatic plants (moderate toxicity) prior to degradation. 4-Chloro-3-methylphenol may accumulate in the fatty tissues of carp and other species.

## **Conclusion**

Under normal conditions of anticipated use as described in this Product Safety Assessment, and if the recommended safe use and handling procedures are followed, 4-Chloro-3-methylphenol is not expected to pose a significant risk to human health or the environment.

## **References**

*International Toxicity Estimate for Risk (ITER)*, U.S. National Library of Medicine, National Institutes of Health and the U.S. Department of Health and Human Services

*Safety Data Sheet (SDS), PREVENTOL CMK*, LANXESS Corporation

*MedlinePlus Medical Encyclopedia*, U.S. National Library of Medicine and the National Institutes of Health

*ToxNet Hazardous Substances Data Bank*, U.S. National Library of Medicine, National Institutes of Health and the U.S. Department of Health and Human Services

## **Contact Information**

LANXESS Corporation, Product Safety & Regulatory Affairs, 111 RIDC Park West Drive, Pittsburgh, PA 15275-1112, USA, Phone 1-800-526-9377 [1-800-LANXESS]

## **Notices**

### **Use and Application Information**

The conditions of your use and application of our products, technical assistance and information (whether verbal, written or by way of production evaluation(s)), including any suggested formulations and recommendations, are beyond our control. Therefore, it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis at least must include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done by LANXESS. All information is given without warranty or guarantee. It is expressly understood and agreed that customer assumes and hereby expressly releases LANXESS from all liability, in tort, contract or otherwise, incurred in connection with the use of our products and information. Any statement or recommendation not contained herein is unauthorized and shall not bind LANXESS Corporation. Nothing herein shall be construed as a recommendation to use any product in violation of any patent covering any material or its use. No permission or license to use any patent is implied or in fact granted by this publication.