



N.S.CHEMICALS

Office :601-611, DEVAVRATA , SECTOR 17, VASHI, NAVI MUMBAI-400 703, M.S. [INDIA]
TEL. +91 [022] 27895695/96 FAX +91 [022] 27895700
E.mail : info@nschemicals.in Web. www.nschemicals.in

Factory: W-3&4, PAWANE VILLAGE, MIDC, , THANE BELAPUR ROAD, NAVI MUMBAI -400705

MATERIAL SAFETY DATA SHEET

4-Chloro-3,5-Dimethylphenol, 99%

[Chloro Xylenol or Para Chloro Meta Xylenol]

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: 4-Cl-3,5-Dimethylphenol, 99%

Synonyms:

3,5-Cl-Xylenol, 4-Cl-; Benzytol;
2-Cl-5-hydroxy-1,3-dimethylbenzene;
4-Cl-1-hydroxy-3,5-dimethylbenzene; 2-Cl-5-hydroxy-m-xylene;
Cl-Cl-xylenol; p-Cl-m-xylenol; 2-Cl-m-xylenol;
4-Cl-3,5-Cl-xylenol; * PCMX; Phenol, 4-Cl-3,5-dimethyl-

Company Identification (India):

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

CAS#	Chemical Name	%	EINECS#
88-04-0	4- <chem>Cl</chem> -3,5-Dimethylphenol	99	201-793-8

Hazard Symbols: XI

Risk Phrases: 36/37/38

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: white to off-white.

Warning! Causes respiratory tract irritation. May cause fetal effects based upon animal studies. Causes eye and skin irritation. May cause digestive tract irritation with nausea, vomiting, and diarrhea. Possible sensitizer.

Target Organs: None known.

Potential Health Effects

Eye: Causes moderate eye irritation.
Skin: Causes skin irritation. May cause an allergic reaction in certain individuals.
Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea.
Inhalation: Causes irritation of the mucous membrane and upper respiratory tract.
Chronic: Animal studies have reported that fetal effects/abnormalities may occur when maternal toxicity is seen. Laboratory experiments have resulted in mutagenic effects.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Immediately flush skin with plenty of soap and

water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Treat symptomatically and supportively.

****** SECTION 5 - FIRE FIGHTING MEASURES ******

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

Use agent most appropriate to extinguish fire. In case of fire use water spray, dry chemical, carbon dioxide, or appropriate foam.

****** SECTION 6 - ACCIDENTAL RELEASE MEASURES ******

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

****** SECTION 7 - HANDLING and STORAGE ******

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid contact with heat, sparks and flame. Avoid ingestion and inhalation.

Storage:

Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

****** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ******

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
4-((Chloro))-3,5-Dimethylphenol	none listed	none listed	none listed

OSHA Vacated PELs:

4-<<Chloro>>-3,5-Dimethylphenol:

No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR §1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

****** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ******

Physical State: Crystalline powder
Appearance: white to off-white
Odor: phenol-like
pH: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate: Not available.
Viscosity: Not available.
Boiling Point: 246 deg C @ 760.00 mmHg
Freezing/Melting Point: 114.00 - 116.00 deg C
Autoignition Temperature: Not applicable.
Flash Point: 132 deg C (269.60 deg F)
NFPA Rating: (est.) Health: 1; Flammability: 1; Reactivity: 0
Explosion Limits, Lower: Not available.
Upper: Not available.
Decomposition Temperature:
Solubility: Slightly soluble.
Specific Gravity/Density:
Molecular Formula: C8H9ClO
Molecular Weight: 156.61

****** SECTION 10 - STABILITY AND REACTIVITY ******

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions. Volatile in steam.

Conditions to Avoid:

Incompatible materials, ignition sources, dust generation, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong bases.

Hazardous Decomposition Products:

Hydrogen chloride, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

****** SECTION 11 - TOXICOLOGICAL INFORMATION ******

RTECS#:

CAS# 88-04-0: ZE6850000

LD50/LC50:

CAS# 88-04-0: Oral, mouse: LD50 = 1 gm/kg; Oral, rat: LD50 = 3830 mg/kg.

Carcinogenicity:

4-<<Chloro>>-3,5-Dimethylphenol -

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology:

No information available.

Teratogenicity:

Oral, rat: TDLo = 17100 mg/kg (female 1-19 day(s) after conception)

Effects on Embryo or Fetus - fetotoxicity (except death, e.g., stunted fetus) and Specific Developmental Abnormalities - musculoskeletal system.

Reproductive Effects:

No information available.

Neurotoxicity:

No information available.

Mutagenicity:

Mutation Test Systems - not otherwise specified: Escherichia coli = 100 umol/L.

Other Studies:

Standard Draize Test: Administration into the eye (rabbit) = 100 mg (Moderate).

****** SECTION 12 - ECOLOGICAL INFORMATION ******

Ecotoxicity:

Fish: Rainbow trout: LC50 = 0.77 mg/L; 96 Hr; UnspecifiedFish:

Bluegill/Sunfish: LC50 = 2.7 mg/L; 96 Hr; UnspecifiedWater flea

Daphnia: EC50 = 4.5-7.7 mg/L; 48 Hr; Static bioassayBacteria:

Phytobacterium phosphoreum: EC50 = 1.99 mg/L; 5 min; Microtox test

****** SECTION 13 - DISPOSAL CONSIDERATIONS ******

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste.

US EPA guidelines for the classification determination are listed in 40 CFR Part 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

****** SECTION 14 - TRANSPORT INFORMATION ******

US DOT

No information available

Canadian TDG

No information available.

****** SECTION 15 - REGULATORY INFORMATION ******

US FEDERAL

TSCA

CAS# 88-04-0 is listed on the TSCA inventory.

Health & Safety Reporting List

CAS# 88-04-0: Effective Date: April 13, 1989; Sunset Date: December 19, 1995

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

4-<<Chloro>>-3,5-Dimethylphenol is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XI

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin.

Safety Phrases:

S 28A After contact with skin, wash immediately with plenty of water.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 88-04-0: No information available.

United Kingdom Occupational Exposure Limits

Canada

CAS# 88-04-0 is listed on Canada's DSL/NDSL List.

This product has a WHMIS classification of D2B.

CAS# 88-04-0 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits

****** SECTION 16 - ADDITIONAL INFORMATION ******

MSDS Creation Date: 5/13/1999 Revision #1 Date: 8/02/2000

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

FOR N.S.CHEMICALS,

AUTH.SIGNATORY