

Material Safety Data Sheet

Pentachlorophenol Treated Wood

4/14/2010

*** Section 1 - Chemical Product and Company Identification ***

Material Name: Pentachlorophenol Treated Wood

Manufacturer Information

Bell Lumber & Pole Co.
778 1st Street NW
New Brighton, MN 55112

Emergency Phone: 651-633-4334

Chemtrec: 800-424-9300

*** Section 2 - Composition / Information on Ingredients ***

CAS #	Component	Wt. Percent
N/A	Wood	>84
N/A	Petroleum solvents	<15
N/A	Fatty acid methyl esters	<15
87-86-5	Pentachlorophenol	<1

*** Section 3 - Hazards Identification ***

Emergency Overview

Product may be irritating to the eyes, skin, and respiratory system. Ingestion may cause central nervous system distress. Kidney or liver disease, bronchitis, asthma, rashes, acne, and some venereal diseases may be aggravated by exposure.

POTENTIAL HEALTH EFFECTS

Eyes

Pentachlorophenol can cause irritation of the eyes @ 1 mg/m³. Prolonged exposure can cause reversible corneal damage. Wood dust can also cause irritation of the eyes.

Skin

Pentachlorophenol is readily absorbed through the skin, causing irritation. Wood dust can also cause dermatitis.

Ingestion

Symptoms of the unlikely ingestion of pentachlorophenol treated wood include rapid heart rate and respiration, elevated temperature and blood pressure, muscular weakness, excessive sweating, dizziness, and/or nausea.

Inhalation

Concentrations of 0.3 mg/m³ pentachlorophenol can cause nose irritation. Concentrations in excess of 1 mg/m³ can cause upper respiratory irritation with sneezing and coughing. Wood dust can cause irritation of the nose and throat.

HMIS Ratings: Health: 1 Fire: 1 Reactivity: 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 4 - First Aid Measures ***

Eyes

Flush eyes with water and seek medical attention immediately.

Skin

Wash affected areas with soap and water. Change contaminated clothes.

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Ingestion

Call a physician or poison control center. Vomiting should be induced by a physician if possible. If not, give victim one or two glasses of water and induce vomiting by touching back of throat.

NOTE TO PHYSICIAN: Pentachlorophenol is a metabolic stimulant. Treatment is supportive. Forced diuresis may be effective to reduce total body burden. Treat hyperthermia with physical measures. Do not administer aspirin, phenothiazines, or atropine since they may enhance toxicity.

Inhalation

Move victim to fresh air. Administer rescue breathing if necessary.

*** Section 5 - Fire Fighting Measures ***

Flash Point: NA

Upper Flammable Limit (UFL): NA

Flammability Classification: NA

Method Used: NA

Lower Flammable Limit (LFL): Wood Dust: 40 g/m3

General Fire Hazards

Wood is combustible and dusts may form explosive mixtures with air in the presence of an ignition source.

Hazardous Combustion Products

Toxic gas and ash are generated on combustion. Product generates hydrochloric acid on combustion.

Extinguishing Media

Water spray, carbon dioxide, dry chemical, or foam. Halon WILL NOT extinguish the fire.

Fire Fighting Equipment/Instructions

Firefighters should wear full protective clothing including self contained breathing apparatus.

*** Section 6 - Accidental Release Measures ***

In Case of Spill

No containment procedures are needed, as this product cannot spill or leak the preservative. Keep away from sparks and flame. Wear appropriate protective equipment and clothing during clean-up. Wet down accumulated dusts prior to sweeping or vacuuming in order to prevent explosion hazards. Sweep up or vacuum small pieces and dusts and place in appropriate container for disposal. Gather larger pieces by an appropriate method. Avoid the generation of airborne dusts during clean-up. Do not inhale dusts during cleanup.

*** Section 7 - Handling and Storage ***

Handling Procedures

Do not generate airborne dusts in the presence of an ignition source when sawing, cutting or grinding wood. Wash hands after handling and before eating. Avoid contact of wood dusts with skin and eyes. Do not breathe wood dusts. Do not eat, drink or smoke when handling this material or in areas where dusts of this product are present.

Storage Procedures

Store treated wood in open, well ventilated area. Maintain good housekeeping procedures, such as sweeping regularly to avoid accumulation of dusts.

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* * * Section 8 - Exposure Controls / Personal Protection * * *

Engineering Controls

Use with adequate ventilation to ensure exposure levels are maintained below the exposure limits. Use a mechanical fan or vent area to outside, where applicable.

PERSONAL PROTECTIVE EQUIPMENT

Eyes

Wear safety glasses with side shields when handling, cutting, sanding or grinding this material. Use a face shield during processes that may generate excessive dusts and splinters.

Skin

Wear puncture resistant work gloves, such as leather. Also use chemical resistant gloves if the puncture resistant gloves show signs of product absorption.

Respiratory

None needed under normal circumstances of use. Maintain airborne contaminant concentrations below exposure limits. If it is anticipated that the exposure limits for dust may be exceeded during work with this product, wear a NIOSH-approved dust mask. If other respiratory protection is needed, use only protection authorized in the U.S. Federal OSHA Standard (29 CFR 1910.134), applicable U.S. State regulations, or the Canadian CSA Standard Z94.4-93 and applicable standards of Canadian Provinces.

Other PPE

Wash pentachlorophenol contaminated clothing frequently and separate from normal laundry. Eye wash fountain is recommended.

Exposure Limit Data

Component Exposure Limits

Wood dust, all soft and hard woods

OSHA: 5 mg/m³ TWA
10 mg/m³ STEL
NIOSH: 1 mg/m³ TWA

Petroleum solvents

ACGIH: 100 mg/m³ TWA (vapor and aerosol, as total hydrocarbons)
skin - potential for cutaneous absorption (as total hydrocarbons)

Pentachlorophenol (87-86-5)

ACGIH: 0.5 mg/m³ TWA
skin - potential for cutaneous absorption
OSHA: 0.5 mg/m³ TWA
Prevent or reduce skin absorption
NIOSH: 0.5 mg/m³ TWA
Potential for dermal absorption

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*** Section 9 - Physical & Chemical Properties ***

Appearance:	Tan or dark brown	Odor:	Petroleum
Physical State:	Solid	pH:	NA
Vapor Pressure:	NA	Vapor Density:	NA
Boiling Point:	NA	Melting Point:	NA
Solubility (H2O):	Wood: Insoluble; Penta: 14 ppm @ 20°C	Specific Gravity:	0.9

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability

Stable

Chemical Stability: Conditions to Avoid

Incompatible with extreme heat and open flames.

Incompatibility

Hydrogen chloride, chlorine, chlorinated hydrocarbons.

Hazardous Decomposition

Hydrogen chloride gas

Hazardous Polymerization

Will not occur.

*** Section 11 - Toxicological Information ***

Acute and Chronic Toxicity

A: General Product Information

Wood dust may be irritating to the eyes, skin and respiratory tract. Depending on the species of wood, recurrent exposure may cause allergic skin and respiratory reactions in some individuals. Epidemiologic studies of the furniture industry have shown an increased incidence of nasal tumors related to wood dust exposure. These same increases are not noted in the building industry. Prolonged overexposure to wood dust has been associated with dryness of nose, eye irritation, nasal obstruction, prolonged colds, and frequent headaches.

Pentachlorophenol has been found to have toxic effects in laboratory animals. This finding may also indicate human toxicity. Exposure to treated wood should be kept to a minimum. Overexposure to pentachlorophenol could result in injury, illness, or even possibly death. Overexposure to pentachlorophenol has caused liver and kidney toxicity in laboratory animals.

B: Component Analysis - LD50/LC50

Pentachlorophenol (87-86-5)

Oral LD50 Rat: 27 mg/kg; Oral LD50 Mouse: 36 mg/kg

Reproductive and Developmental Toxicity

The U.S. EPA has determined that pentachlorophenol can cause defects in the offspring of laboratory animals. Exposure to pentachlorophenol during pregnancy should be avoided. Reproductive toxicity tests have been conducted to evaluate the potential adverse effects of pentachlorophenol on the reproduction of laboratory animals. Pentachlorophenol has been found to be embryo and fetotoxic to rats, but not to hamsters. Pentachlorophenol did not cause teratogenic effects (birth defects), but did cause delays in normal fetal development.

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Carcinogenicity

A: General Product Information

Pentachlorophenol has been evaluated for possible cancer causation in laboratory animals. Male and female mice evaluated by the National Toxicology Program were fed up to 400 ppm technical penta, and up to 600 ppm purified penta 5 days a week for 106 weeks. A statistically significant increase in liver and endocrine tumors occurred in the male mice, while an increase in vascular tumors occurred in the female mice. The female mice also had an increase in liver tumors when fed the highest dose of purified penta. Rats ingesting 30 mg/kg/day for 2 years, along with 2 strains of mice ingesting 46.4 mg/kg/day for 2 years, did not show any increased incidence of tumor. Pentachlorophenol, 2,3,4,6-Tetrachlorophenol, and Hydroxypolychlorodibenzo ethers are not listed on the IARC, NTP, or OSHA carcinogen lists.

NOTE: Pentachlorophenol contains trace amounts of Hexa, Hepta, and Octachlorodibenzo-p-dioxins, Hexa, Hepta, and Octachlorodibenzofurans, and Hexachlorobenzene. The State of California has listed Hexachlorodibenzo-p-dioxin and Hexachlorobenzene as chemicals known to the State to cause cancer.

B: Component Carcinogenicity

Wood dust, all soft and hard woods

NIOSH: potential occupational carcinogen
NTP: Known Carcinogen (Select Carcinogen)
IARC: Monograph 62, 1995 (Group 1 (carcinogenic to humans))

Petroleum solvents

ACGIH: A3 - Animal Carcinogen (as total hydrocarbons)

Pentachlorophenol (87-86-5)

ACGIH: A3 - Animal Carcinogen

*** Section 12 - Ecological Information ***

Overview

A: General Product Information

The wood preservative components of this product are, by design, toxic to wood deteriorating organisms. This product is not expected to leach harmful amounts of preservative into the environment. However, toxicity profiles for non-target organisms for the preservative components in this product are tabled below.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

Pentachlorophenol (87-86-5)

Test & Species	Data	Conditions
96 Hr LC50 fathead minnow	0.0986 mg/l	flow-through
96 Hr LC50 rainbow trout	0.052 mg/l	Static
96 Hr LC50 bluegill sunfish	0.032 mg/l	Static
96 Hr EC50 freshwater green algae (Chlorella vulgaris)	0.09 mg/l	
30 min EC50 Photobacterium phosphoreum	0.519 mg/l	
96 Hr LC50 water flea	475 µg/l	

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*** Section 13 - Disposal Considerations ***

Waste Disposal Summary

A: General Product Information

Waste disposal must be in accordance with appropriate Federal, State, and local regulations.

B: Component Waste Numbers

Pentachlorophenol (87-86-5)

RCRA: 100.0 mg/L regulatory level

Disposal Methods

Dispose of treated wood by ordinary trash collection or burial. Treated wood should not be burned in open fires or in stoves, fireplaces, or residential boilers because toxic chemicals may be produced as part of the smoke and ashes. Treated wood from commercial or industrial use (e.g., construction sites) may be burned only in commercial or industrial incinerators or boilers rated at 20 million BTU/hour or greater heat input or its equivalent in accordance with State and Federal regulations.

*** Section 14 - Transportation Information ***

This product is not considered as dangerous goods as defined by 49 CFR 172.101 by the U.S. Department of Transportation, or by regulations of Transport Canada.

*** Section 15 - Regulatory Information ***

US Federal Regulations

Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4). SARA Section 313 requires a notice to be sent to customers that repackage or redistribute this product.

Pentachlorophenol (87-86-5)

SARA 313: 0.1 % de minimis concentration

CERCLA: 10 lb final RQ; 4.54 kg final RQ

Acute Health: Yes **Chronic Health:** Yes **Fire:** Yes **Pressure:** No **Reactive:** No

State Regulations

Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Wood dust, all soft and hard woods	N/A	No	No	Yes	No	No	Yes
Pentachlorophenol	87-86-5	Yes	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

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Canadian WHMIS Information

Component Analysis - WHMIS IDL

No components are listed in the WHMIS IDL.

WHMIS Classification: D2A

Government Inventory Lists

Component Analysis - Inventory

Component	CAS #	TSCA	DSL	EINECS
Petroleum solvents	N/A	Yes	Yes	Yes
Fatty acid methyl esters	N/A	Yes	Yes	Yes
Pentachlorophenol	87-86-5	Yes	Yes	Yes

*** Section 16 - Other Information ***

MSDS Revision Status

Issue Date: 4-14-2010

Supersedes: 7-1-1994

Additional Information

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.