

SAFETY DATA SHEET

COPPER NAPHTHENATE TREATED WOOD

PLEASE NOTE THIS INFORMATION IS BASED ON THE MATERIAL USED TO TREAT THE WOOD AND INCLUDES HAZARDS ASSOCIATED WITH WOOD DUST GENERATED FROM SAWING, SANDING, ROUTING, OR CHIPPING. THESE HAZARDS ARE ESSENTIALLY THE SAME AS UNTREATED WOOD.

SECTION 1 – IDENTIFICATION

CHEMICAL NAME: COPPER NAPHTHENATE TREATED WOOD
PRODUCT USE: LUMBER, POLES, TIMBER

MANUFACTURER INFORMATION: Permapost Products Company, Inc.
4205 SE WITCH HAZEL ROAD
P.O. Box 100
Hillsboro, OR 97123

MANUFACTURER TELEPHONE: 503.648.4156
EMERGENCY TELEPHONE: CHEMTREC: 1-800-424-9300

NOTE: Emergency telephone numbers are to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals. A non-emergency questions should be directed to manufacturer customer service.

SECTION 2 – HAZARDS IDENTIFICATION



Signal Word: DANGER, Wood dust may form an explosive mixture with air. Wood dust may cause irritation to the eyes, skin, and respiratory tract. Exposure to copper naphthenate may cause health hazards described below.

Hazard Statement(s):

- May form combustible dust concentrations in air.
- Causes skin irritation or allergic skin reaction
- Causes eye irritation
- May cause respiratory irritation, allergy or asthma symptoms or breathing difficulties, if inhaled
- May cause cancer
- May cause drowsiness or dizziness

Classification in accordance with 29 CFR 1910.1200

- Combustible Dust
- Skin Corrosion / Irritation, Category 2
- Eye Damage / Irritation, Category 2A
- Respiratory sensitizer, Category 1
- Skin sensitizer, Category 1

- Carcinogenicity, Category 1A
- Specific Target Organ Toxicity - Single Exposure, Category 3 (central nervous system, respiratory tract)
- Specific Target Organ Toxicity – Repeated Exposure, Category 2 (kidneys, liver, spleen)

ROUTES OF ENTRY:

1. INHALATION: Poor hygiene while smoking, inhalation of sawdust.
2. EYES: Flying sawdust, transfer from hands to eyes.
3. SKIN: Absorbed readily through unprotected skin.
4. INGESTION: Eating or drinking without proper hygiene.

POTENTIAL HEALTH EFFECTS: EYES, Contact with eyes can cause severe irritation, redness, tearing, and blurred vision.

POTENTIAL HEALTH EFFECTS: SKIN, Copper Naphthenate may be readily absorbed through the skin. Prolonged or repeated contact with skin can cause severe irritation or dermatitis.

POTENTIAL HEALTH EFFECTS: INGESTION, Eating treated sawdust may cause mouth, throat and stomach irritation.

POTENTIAL HEALTH EFFECTS: INHALATION, Inhaled wood dust may be irritating to nose and throat. Can cause chest pains and chemical pneumonitis.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: May cause damage to kidneys, liver, and spleen through prolonged or repeated exposure.

Precautionary Statement(s)

Prevention

Wash thoroughly after handling. Wear protective gloves and eye/face protection. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area. Do not breathe dust.

Avoid release to the environment.

Response

IF EXPOSED OR CONCERNED: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Storage

Store in a well-ventilated place. Store locked up.

Disposal

Dispose in accordance with all applicable regulations.

Hazard(s) Not Otherwise Classified

No information is available

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT NAME</u>	<u>CAS</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>% Range</u>
Copper Naphthenate	1338-02-9	Not Available	1.0 mg/m ³	0.05 – 4.0%
Petroleum Solvents	N/A	50 mg/m ³	10 ppm	<0.01 – 20.0% See note*
Wood/Wood dust	Not Available	5.0 mg/m ³	1.0 mg/m ³	>90%

**Residual hydrocarbon solvent may result in detectable odors. The odor level is influenced by the amount of solvent remaining in the wood and the type of solvent used as a preservative carrier.*

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Wood dusts- hard wood, Wood dust, all soft and hard woods, Wood dusts (all other wood dusts), Wood dusts, birch, mahogany, teak, walnut, Mineral spirits (64475-85-0).

Other Information

The above values may vary slightly due to the variability of treatment and the natural variability of wood. The above percentage ranges are in compliance with the Canadian Workplace Hazardous Information System (WHMIS).

SECTION 4 – FIRST AID MEASURES

1. **INHALATION:** If affected, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has stopped, give artificial respiration. Keep person warm, quiet. Get medical attention.
2. **EYE CONTACT:** If wood fibers are in the eyes, open victim's eyes while under gentle running water. Use sufficient force to open eye lids. Have victim "roll" eyes. Do not rub eyes. Minimum flushing is for 15 minutes. Seek medical attention, especially if splintering occurs in the eye.
3. **SKIN CONTACT:** Thoroughly wash exposed area with soap and water. Do not rub skin until skin is free of sawdust and preservative material. Remove contaminated clothing. Launder contaminated clothing before re-use.
4. **INGESTION:** If treated wood is swallowed, call physician or poison control center. Vomiting should only be induced by a Physician if possible. Seek medical advice or attention immediately.

SECTION 5 – FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water Spray, Carbon Dioxide, regular dry chemical or foam.

Unsuitable Extinguishing Media: Do not use high-pressure water streams.

Specific Hazards Arising from the Chemical: Slight fire hazard. Dust/air mixtures may ignite or explode.

Hazardous Combustion Products: Oxides of carbon, oxides of nitrogen, oxides of sulfur, hydrogen chloride

Fire Fighting Measures: Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Cool containers with water. Use extinguishing agents appropriate for surrounding fire.

Special Protective Equipment and Precautions for Firefighters: Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Copper Naphthenate treated wood is unlikely to be involved in a release or spill because the chemical is fixed in the wood. If treated wood or chemical is released, follow the instructions below.

Personal Precautions, Protective Equipment and Emergency Procedures

Wear personal protective clothing and equipment, see Section 8. Avoid release to the environment.

Methods and Materials for Containment and Cleaning Up

Collect debris and used material in appropriate container for disposal. Airborne material may form explosive dust-air mixtures. Wet down area with water. Avoid generating dust. Avoid accumulation of airborne dusts. Sweep and scoop spilled material into clean, dedicated equipment. Clean up residue with vacuum. Keep unnecessary people away, isolate hazard area and deny entry

SECTION 7 – HANDLING AND STORAGE

Precautions for Safe Handling

DO NOT BURN TREATED WOOD.

Follow good hygienic and housekeeping practices. Clean-up areas where wood dust settles to avoid excessive accumulation of this combustible material. Minimize practices that generate airborne dust. When possible, conduct dust-generating activities outdoors to avoid indoor accumulations of airborne dust from treated wood. Avoid prolonged or repeated skin contact with this material. Do not breathe dust. Wash thoroughly after handling. When handling treated wood, wear washable or disposable coveralls or long-sleeved shirt and long pants, chemical resistant gloves, and socks plus industrial grade safety boots with chemical resistant soles. Wear protective eye/face protection. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Use only outdoors or in a well-ventilated area. Treated wood is intended for exterior/outdoor uses only.

Conditions for Safe Storage, including any Incompatibilities

Store in accordance with all current regulations and standards. Store outdoors. Keep in a cool, dry place away from open flame. Incompatibilities: strong acids

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

Wood/Wood Dust

ACGIH:	1 mg/m ³ TWA (inhalable fraction, related to Wood dusts (all other wood dusts))
NIOSH:	1 mg/m ³ TWA (related to Wood dust, all soft and hard woods)
OSHA (vacated):	5 mg/m ³ TWA (related to Wood dust, all soft and hard woods) 10 mg/m ³ STEL (related to Wood dust, all soft and hard woods)
Mexico:	1 mg/m ³ TWA LMPE-PPT (related to Wood dusts-hard wood)

Appropriate Engineering Controls

Provide local exhaust ventilation system. Ventilation equipment should be explosion-resistant if explosive concentrations of material are present. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective

Equipment Eyes/Face Protection: Wear safety glasses with side shields. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection: Wear appropriate chemical resistant clothing. Wear washable or disposable coveralls or long-sleeved shirt and long pants. Wear socks plus industrial grade safety boots with chemical resistant soles.

Glove Recommendations

Wear leather or other appropriate work gloves, if necessary for type of operation. Wear impervious gloves.

Respiratory Protection

If the applicable TLVs and/or PELs are exceeded, use canister or cartridge respirators, which are MSHA/NIOSH- approved, with high-efficiency particulate filters.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Green, blue gray, to natural solid wood. Petroleum odor
BOILING POINT: N/A
FLASH POINT: >200 degrees C
LEL: 40 grams/m³ for wood dust
VAPOR PRESSURE (mmHg): N/A
DENSITY: 24-52 lb/ft³ (water at 20 degrees C = 62.4)
EVAPORATION RATE (nBuAC=1): N/A
% VOC CONTENT BY WEIGHT: N/A
SPECIFIC GRAVITY (H₂O=1): N/A
pH: N/A
FREEZING POINT: N/A
VAPOR DENSITY (AIR=1): N/A
MELTING POINT: N/A
REACTIVITY IN WATER: NIL
SOLUBILITY IN WATER: Wood fiber – insoluble

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: No reactivity hazard is expected.

Chemical Stability: Stable at normal temperatures and pressure.

Possibility of Hazardous Reactions: Will not polymerize.

Conditions to Avoid: Avoid heat, flames, sparks and other sources of ignition.

Incompatible Materials: Strong acids

Hazardous Decomposition: Combustion: oxides of carbon, oxides of nitrogen, oxides of sulfur, hydrogen chloride

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute and Chronic Toxicity

Component Analysis - LD50/LC50: The components of this material have been reviewed in various sources and no selected endpoints have been identified.

Wood Dust: The principal health effects reported from occupational exposure to sawdust or wood dust generated from untreated wood are dermatitis, rhinitis, conjunctivitis, reduced or suppressed mucociliary clearance rates, chronic obstructive lung changes, and nasal sinus cancer.

Information on Likely Routes of Exposure

Inhalation: Irritation, allergic reactions, nausea, vomiting, dryness, loss of appetite, coughing, nosebleed, chest pain, difficulty breathing, drowsiness, headache, dilated pupils, visual disturbances, irregular heartbeat, liver damage, kidney damage, nasal/sinus cancer, headache

Ingestion: Irritation, nausea, vomiting, diarrhea, loss of appetite, difficulty breathing, irregular heartbeat, headache, drowsiness

Skin Contact: Irritation, allergic reactions, skin disorders, rash, difficulty breathing, irregular heartbeat, headache, visual disturbances, kidney damage

Eye Contact: Irritation, sensitivity to sunlight, blurred vision, eye damage

Immediate Effects (acute): Respiratory tract irritation, skin irritation, eye irritation, allergic reactions, central nervous system depression

Delayed Effects (chronic): Allergic reactions, kidney damage, liver damage, spleen damage, cancer

Medical Conditions Aggravated by Exposure: No data available.

Irritation/Corrosivity Data: Respiratory tract irritation, skin irritation, eye irritation

Respiratory Sensitization: Yes

Dermal Sensitization: Yes

Carcinogenicity: Known Human Carcinogen

Component Carcinogenicity

Wood/Wood Dust

ACGIH: A1 - Confirmed Human Carcinogen (related to Wood dusts-hard wood)

IARC: Monograph 100C [2012]; Monograph 62 [1995] (Group 1 (carcinogenic to humans), related to Wood dust, all soft and hard woods)

NTP: Known Human Carcinogen (related to Wood dust, all soft and hard woods)

Mutagenic Data: No data available for the mixture.

Reproductive Effects Data: No data available for the mixture.

Specific Target Organ Toxicity - Single Exposure: Respiratory system, central nervous system

Specific Target Organ Toxicity - Repeated Exposure: Kidneys, liver, spleen

Aspiration Hazard: Not expected to be an aspiration hazard.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: No data available for this product. Components of this product are very toxic to aquatic life with long lasting effects.

Component Analysis - Aquatic Toxicity: No LOEL ecotoxicity data are available for this product's components.

Fish Toxicity: COPPER NAPHTHENATE: 0.161 mg/L 96 hours LC50 Rainbow trout

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Mobility: No data available

SECTION 13 – DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose in accordance with all applicable Federal, State, and local regulations. 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.

Waste Numbers

There are no applicable U.S. EPA listed waste codes (40 CFR 261 Subpart D) for this product

SECTION 14 – TRANSPORTATION INFORMATION

US DOT Information

Not regulated.

TDG Information

Not regulated.

SECTION 15 – REGULATORY INFORMATION

U.S. Federal Regulations

None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA 311/312 Hazardous Categories

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

U.S. State Regulations

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

Component	CAS	CA	MA	MN	NJ	PA
Wood/Wood Dust (1related to: Wood dust, all soft and hard woods) (2related to: Wood dusts-hard wood)	Not Available	No	No	Yes ¹	Yes ¹	Yes ²

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.

Canada: WHMIS CLASSIFICATION: D2A, D2B.

Canadian WHMIS Ingredient Disclosure List (IDL)

Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on the IDL.

Copper Naphthenate (1338-02-9) - 1 %

Component Analysis - Inventory

Component	CAS	US	CA
Copper Naphthenate	1338-02-9	Yes	DSL

SECTION 16 – OTHER INFORMATION

NFPA Ratings: Health: 2, Fire: 1, Reactivity: 0

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

Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CFR = Code of Federal Regulations.; CPR - Controlled Products Regulations; DSL - Domestic Substances List; EPA - Environmental Protection Agency; F - Fahrenheit; IARC - International Agency for Research on Cancer; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; Kow - Octanol/water partition coefficient; LEL - Lower Explosive Limit; LOLI - List Of Lists™ - ChemADVISOR's Regulatory Database; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; OSHA - Occupational Safety and Health Administration; RCRA - Resource Conservation and Recovery Act; RTECS - Registry of Toxic

Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States; WHMIS - Workplace Hazardous Materials Information System

Other 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. Read the Safety Data Sheet before handling product.

END OF SAFETY DATA SHEET