

SOFTWOOD PLYWOOD

SECTION 1 - PRODUCT and COMPANY INFORMATION

Product Identifier: **SOFTWOOD PLYWOOD (Phenol-Formaldehyde Bonded)**

General Use: Construction and other operations where a high quality, high strength, roofing product is desired.

Product Description: A panel product manufactured from wood veneer and phenol-formaldehyde resins, under heat and pressure.

MANUFACTURER: Potlatch Corporation
601 West First Ave., Suite 1600
Spokane, Washington 99201
(509) 326 8850 (Sales Office)

EMERGENCY: (509) 326 8850

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS #	PERCENT	EXPOSURE LIMITS IN AIR (1)			
			ACGIH - TLV		FEDERAL OSHA-PEL	
			TWA mg/m ³	STEL mg/m ³	TWA mg/m ³	STEL mg/m ³
Softwood wood dust		99%	1 mg/m ³ Inhalable fraction	10 mg/m ³	15 mg/m ³ 5.0 mg/m ³ , Respirable fraction	NE
Phenol-Formaldehyde Resin <i>Exposure limits are for formaldehyde</i>	9003-35-4	< 1%	0.3 ppm (Ceiling)	NE	0.75 ppm	2 ppm

- Although OSHA's 1989 air contaminant rule, including OSHA's wood dust PEL's, was struck down in *AFL-CIO v. OSHA*, 965 f. 2d 962 (11th Cir. 1992), a number of states have incorporated the 1989 provisions in their state plans. Additionally, OSHA has announced that it may cite companies under the OSHA Act General Duty Clause under appropriate circumstances for non-compliance with the 1989 levels. The 1989 OSHA Standards were 5 mg/m³ PEL, TWA (Total Dust, all softwood and hardwood except Western Red Cedar). The 1989 STEL (15 min) was 10 mg/m³ (Total Dust).
- This product contains less than 1.0% free or unreacted phenol and less than 0.1% free or unreacted formaldehyde in the resin used.

SECTION 3 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This panel product consists of pressed wood wafers that has a mild chemical odor and presents limited hazards in its solid form. Sawing, sanding or otherwise machining this product can produce wood dust, which may present an explosion hazard. Exposure to wood dust may cause eye, nose and throat irritation.

POTENTIAL HEALTH HAZARDS:

ACUTE

INHALATION: The primary health hazard posed from machining this product is thought to be due to inhaling wood dust. Inhaling wood dust may cause dryness, irritation, obstruction and may aggravate preexisting respiratory condition or allergies. Coughing, wheezing, sneezing, sinusitis and prolonged colds have also been reported.

EYE CONTACT: Dusts from this product can cause mechanical irritation.

SKIN CONTACT: The resin component of this product contains trace amounts of formaldehyde, which along with various species of wood dust may evoke allergic contact dermatitis in sensitized individuals.

INGESTION: Not applicable under normal conditions.

CHRONIC

Wood Dust, depending on species, may cause dermatitis, respiratory sensitization and/or irritation upon prolonged, repetitive exposure. The International Agency for Research on Cancer (IARC) classifies wood dust as a carcinogen to Humans (Group 1), and The National Toxicology Program (NTP) classifies wood dust as known to be a human carcinogen. These classifications are primarily based on studies that evaluated the increased risk in occurrences of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to hardwood dust. Sufficient evidence was not found to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hemotopoietic systems, stomach, colon or rectum with exposure to wood dust. Prolonged eye exposure may cause reversible corneal damage.

Sources: Volume 62 Wood Dust IARC Monograph, 1995; 10th Biennial Report on Carcinogens, NTP, 2002.

SECTION 4 - FIRST AID MEASURES

INHALATION: Wood dust may cause unpleasant deposits/obstructions in the nasal passages resulting in dryness of nose, dry cough, sneezing and headaches. Remove to fresh air. Obtain medical attention if persistent irritation, severe coughing or breathing difficulty occur.

EYE CONTACT: Dusts generated from this product may cause mechanical irritation. Treat dust in eye as foreign object. Flush eyes with large amounts of water to remove dust particles. Obtain medical attention if irritation or wood splinters exist.

SKIN CONTACT: Wood dust of certain species can elicit allergic contact dermatitis in sensitized individuals, as well as erythema and hives. Obtain medical help if rash or irritation persists or dermatitis occurs.

INGESTION: Not applicable under normal use.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing respiratory problems, eye problems, dermatitis and other skin disorders can be aggravated by exposures to dusts of this product.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate overexposure.

SECTION 5 - FIRE-FIGHTING MEASURES

FIRE FIGHTING INSTRUCTIONS: Fire fighting procedures for a Class A fire should be followed. Use water to wet down wood dust to reduce the likelihood of ignition or dispersion of dust into the air. Remove burned, charred or wet dust to open secure area after fire is extinguished.

FLASH POINT: NAP

FLAMMABLE LIMITS:

LEL: See below under "UNUSUAL FIRE AND EXPLOSION HAZARDS"

UEL: NAP

AUTOIGNITION TEMPERATURE (F OR C): 400 to 500 DEG. F.

FIRE EXTINGUISHING MEDIA: Water, Carbon Dioxide, Foam, Dry Chemical, Halon and any Class "ABC" extinguishing media.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Depending on moisture content and more importantly, particle diameter, wood dust may explode in the presence of an ignition source. An airborne concentration of 40 Grams (40,000 Milligrams) of dust per cubic meter of air is often used as the LEL for wood dusts.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

LAND SPILL: Generally not applicable to panel products, however if a spill occurs the applicable federal, state, provincial and local regulations must be followed.

WATER SPILL: Generally, not applicable to panel products, however if a spill occurs the applicable federal, state, provincial and local regulations must be followed.

SECTION 7 - HANDLING AND STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: Wash skin that comes in contact with product after handling. Do not eat, drink or smoke while handling or working with this product or in areas where there are dusts of this product.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: No special handling precautions are required. Store in cool, dry place away from open flame.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Certain activities in the re-manufacturing and use of this product could possibly produce wood dust or formaldehyde vapors. Provide adequate general and local exhaust ventilation to keep airborne contaminant concentrations below the safe exposure limits.

PERSONAL PROTECTION (If necessary, refer to the appropriate OSHA or Canadian PPE Standards)

RESPIRATORY PROTECTION: None needed under normal use. Wear NIOSH/MSHA approved respiratory protection when safe exposure limits are exceeded.

EYE PROTECTION: Safety glasses with side shields recommended when re-manufacturing or otherwise working with this product.

PROTECTIVE CLOTHING: Other protective equipment such as puncture resistant gloves and outer garments may be needed depending on how product is used and/or dust conditions presents.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE: NAP	VAPOR DENSITY: NAP
SPECIFIC GRAVITY: 0.40 – 0.80	EVAPORATION RATE: NAP
SOLUBILITY IN WATER: <0.1	MELTING/FREEZING POINT: NAP
pH: NAP	ODOR: Slight Chemical
BOILING POINT: NAP	APPEARANCE: Light Brown to Tan Panel
VISCOSITY: NAP	PHYSICAL STATE: Solid

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions

REACTIVITY: Avoid product contact with any temperature sources that could induce thermal decomposition. Avoid product contact with oxidizing agents and strong acids.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION: Thermal and/or thermal-oxidative decomposition can produce irritating and toxic fumes and gases, including carbon oxides, polynuclear aromatic hydrocarbons, aldehydes, terpenes and organic acids.

SECTION 11 - TOXICOLOGY INFORMATION

TOXICITY DATA: Currently there are no toxicological data for wood dust. The following are toxicology data for the resin component of this product.

PHENOL, RESIN WITH FORMALDEHYDE

LD50 (Oral-Rat) > 5 gm/kg

LD50 (Skin-Rat) > 2 gm/kg

CARCINOGENICITY: Wood dust is not considered a potential carcinogen by OSHA. IARC classifies wood dust as a carcinogen to Humans (Group 1). NTP classifies wood dust as known to be a human carcinogen. These classifications are primarily based on studies that evaluated the increased risk in occurrences of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to hardwood dust. Sufficient evidence was not found to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hemotopoietic systems, stomach, colon or rectum with exposure to wood dust.

The trace Formaldehyde component of this product is classified by the NTP as Reasonably Anticipated to Be a Human Carcinogen, by OSHA as a Carcinogen Defined with no Further Classification and by IARC as Probably Carcinogenic to Humans. The remaining components of this product are not found on the following lists: Federal OSHA Z List, NTP, IARC and Cal/OSHA.

IRRITANCY OF PRODUCT: This product is slightly irritating to eyes, skin and respiratory system.

SENSITIZATION TO THE PRODUCT: Some individuals can become sensitized to wood dusts and develop allergy-like symptoms upon repeated exposure.

REPRODUCTIVE TOXICITY INFORMATION: This product is not reported to cause reproductive effects in humans.

SECTION 12 - ECOLOGICAL INFORMATION

ENVIRONMENTAL STABILITY: The wood portion of this product will eventually decompose if left in the environment. The remaining products of this product are relatively stable under ambient, environmental conditions.

EFFECT OF MATERIAL ON PLANTS AND ANIMALS: This product is not expected to cause harm to plants or animals in the environment.

EFFECT OF CHEMICAL ON AQUATIC LIFE: This panel product is not expected to cause harm in an aquatic environment unless a large quantity is left in a body of water.

SECTION 13 - DISPOSAL CONSIDERATIONS

This panel product is recyclable. It is, however, the user's responsibility to determine at the time of disposal whether your product meets any applicable criteria for hazardous waste disposal. Disposal must follow applicable federal, state, provincial and local regulations.

SECTION 14 - TRANSPORTATION INFORMATION

This product is not considered hazardous as defined by 49 CFR 172.101 by the U.S. Department of Transportation.

PROPER SHIPPING NAME: Not Regulated

HAZARD CLASS NUMBER AND DESCRIPTION: NAP

UN IDENTIFICATION NUMBER: NAP

PACKAGING GROUP: NAP

DOT LABEL (S) REQUIRED: NAP

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (2000): NAP

MARINE POLLUTANT: No component of this product is listed as a marine pollutant by the DOT (49 CFR 172.101, Appendix B.)

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOOD REGULATIONS: This product is not considered as dangerous goods, per regulations of Transport Canada.

SECTION 15 - REGULATORY INFORMATION

U.S. OSHA:

This product, and/or by-products of machining this product, are regulated by the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.

U.S. EPA

SARA REPORTING REQUIREMENTS: The trace formaldehyde component of this product is subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act, as follows:

CHEMICAL NAME	SARA 302 (40 CFR 355, Appendix A)	SARA 304 (40 CFR Table 302.4)	SARA 313 (40 CFR 372.65)
Formaldehyde	Yes	Yes	Yes

SARA THRESHOLD PLANNING QUANTITY: The trace Formaldehyde component of this product has a Threshold Planning Quantity of 500 lb. (270 kg). In addition, Under Section 304, Formaldehyde EHS Reportable Quantity of 100 lb. (4.54 kg)

CERCLA REPORTABLE QUANTITY (RQ): The trace Formaldehyde component of this product has a CERCLA Reportable Quantity (RQ) of 100 lb. (4.45 kg).

TSCA INVENTORY STATUS: The components of this product are listed on the TSCA Inventory.

OTHER U.S. FEDERAL REGULATIONS: During releases of this product, the rules of the Federal Water Pollution Control Act may be applicable. In addition, due to the trace amounts of formaldehyde in this product, requirements under 29 CFR 1910.1048 should be consulted.

SECTION 15 - REGULATORY INFORMATION (Cont.)

CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65): Formaldehyde, which is a trace component in this product, and is on the California Proposition 65 Lists as chemicals known to the State of California to cause cancer. **WARNING.** This product contains a trace component that is known to the State of California to cause cancer or other reproductive harm.

ADDITIONAL CANADIAN REGULATIONS:

CANADIAN DSL/NDL INVENTORY STATUS: The components of this product are on the DSL Inventory.

OTHER CANADIAN REGULATIONS: Not applicable.

CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITY SUBSTANCES LISTS: The trace Formaldehyde component of this product is on the CEPA Priority Substances Lists.

CANADIAN WHMIS SYMBOL: (For Dusts) **D2A**; Materials Causing Other Toxic Effects (Chronic Effects Sensitization and Possible Carcinogenic Effects)

SECTION 16 - OTHER INFORMATION

The information contained in this Material Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if this information is suitable for their applications and to follow safety precautions as may be necessary. The user has the responsibility to make sure that this sheet is the most up-to-date issue.

Definition of Common Terms:

ACGIH	=	American Conference of Governmental Industrial Hygienists
C	=	Ceiling Limit
CAS#	=	Chemical Abstracts System Number
IARC	=	International Agency for Research on Cancer
MSHA	=	Mine Safety and Health Administration
NAP	=	Not Applicable
NAV	=	Not Available
NIOSH	=	National Institute for Occupational Safety and Health
NTP	=	National Toxicology Program
OSHA	=	Occupational Health and Safety Administration
PEL	=	Permissible Exposure Limit
STEL	=	Short Term Exposure Limit (15 minutes)
TLV	=	Threshold Limit Value
TWA	=	Time-Weighted Average (8 hours)