## LIBERTY WOODS INTERNATIONAL, INC. MATERIAL SAFETY DATA SHEET

Date Issued: May 30, 1997

PRODUCT IDENTIFICATION.	Hardwoo	Hardwood Plywood, Wood and Wood Products (Non urca-Formaldshyde Bonded)				
SYNONYMS:	Lumber,	Lumber, Wood dust, Sander dust, Plywood and OSB (phenolic realins may be present)				
DESCRIPTION:		Particles generated by any manual or mechanical cutting or abrasion process performed on wood may generate wood dust.				
MANUFACTURERS NAME:	Various	Various sources				
<u>Hazardolis ingredients</u> Component	CAS#	*/_	ACCIH Exposure Limits	OSHA Exposure Limits		
Wood dust (Softwood Species)	None	95-100	5mg/M3 8-hr TWA 10mg/M3 STEL (15 min)	15mg/M3 TWA - PEL (Total dust) 5 mg/M3 STEL (respirable fraction)		
Wood dust (Certain hardwoods as beech and oak)	None	95-100	lmy/M3 8-hr TWA None - STEL	1 Smg/M3 TWA - PEL (Total dust) 5 mg/M3 STEL (respirable fraction)		
Wood dust (Western Red Cedar)	None	95-100	None	2.5mg/M3 TWA		
Phenolic Resin (containing less than 1% formaldehyde)	None	0-5	lppm - TWA Nonc - STEL	1ppm - TWA - PEL 2ppm - STEL - PEL		

In AFL-CIO vs. OSHA 965 F 2d 962 (11th Cir. 1992), the court overturned OSHA's 1989 Air Contaminants Rule, including the specific PELs for wood dust that OSHA had established at that time. <u>The 1989 PELs were: TWA - Smg/M3 (ALI, SOFTWOODS AND HARDWOODS, EXCEPT</u> WESTERN RED CEDAR): WESTERN RED CEDAR: TWA - 2.5mg/M3.

Vood dust is now officially regulated as an organic dust under the Particulates Not Otherwise Regulated (PNOR) or inert or Nuisance Dust categories at PELs noted under Health Effects Information section of this MSDS, However, <u>A NUMBER OF STATES HAVE INCORPORATED</u> PROVISIONS OF THE 1989 STANDARD 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 PELS.

PHYSICAL PROPERTU
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	NT/A
Boiling Point:	N/A
Specific Gravity (H20=1):	<]
Vapor Pressure:	N/A
% Volatiles:	N/A ·
Melting Point:	N/A
Vapor Density:	N/A
Solubility in H20:	Insoluble
Evaporation Rate:	N/A
pH:	NA
Appearance and Odor:	Light to dark in color, granular solid. Color and odor are dependent on the wood species and time since
	dust was generated.
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Variable (Typically 400-500 Degrees F)

FIRE AND	EXPLOSIO	N DATA
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N/A

Flash Point: Auto-Ignition Temperature: Explosive Limits in Air: Extinguishing Media: Special Fire Fighting Properties:

Unusual Fire and Explosive Hazards:

REACTIVITY DATA Stability:

Incompatibility:

Hazardous Decomposition Products:

Hazardous Polymerization:

## 40 grams/M3 (LEL) Water, Carbon Dioxide, Sand Use water to wet down wood dust to reduce the likelihood of ignition or dispersion of dust into air. Remove burned or wet dust to open area after fire is extinguished. Wood dust may present a strong to severe explosion hazard if dust cloud contacts an ignition source. Stable under normal conditions Avoid contact with oxidizing agents and drying oils. Avoid open flame. Product may ignite at temperatures in excess of 400 degrees F. Thermal-oxidative degradation of wood produces irritating and toxic fumes and gases, including CO, alighydes and inorganic acids. Will not occur.

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Wood dust is extremely combustible. Keep away from ignition sources.

## HEALTH EFFECTS INFORMATION SIGNS AND SYMPTOMS OF EXPOSURE Wood dust can cause eye irritation. Various species of wood dust can elicit allergic contact dermatitis Skin and Eye Contact: In sensilized individuals. Not Applicable Ingestion: Not Know to Occur Skin Absorption: May cause nasal dryness, initation and obstruction. Coughing, wheezing, and succeing; sinusitis and Inhalation: pretonged colds have also been reported. Certain species of wood dust may cause dermatitis, respiratory sensitization and/or irritation on Chronic Effects: prolonged repetitive contact, IARC classifies wood dust as a carcinogen to humans (Group 1). This classification is based primarily on IARC's evaluation of increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal shuses associated with exposure to wood dust. IARC did not find sufficient evidence to associate cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum with exposure to wood dust. Medical Conditions Respiratory conditions and allergies Aggravated by Exposure: EMERGENCY FIRST AID PROCEDURES Flush with water to remove dust particles. If irritation persists get medical anomion. Eves: Seek medical attention if a rash, dermativis or other skin disorders occur. Skin: N/A ingestion; Remove to fresh sir. If initation or other symptoms persist, consult a physician. Inheletion: PRECAUTIONS FOR SAFE HANDLING AND USE Steps to be Taken in case Material Sweep up of vacuum spills for recovery or disposal; avoid cresting dust conditions. Provide good s released or spilled: ventilation. Place recovered wood dust in a container for proper disposal. Dispose in a landfill or incincrator in accordance with local, state, and federal regulations. Waste disposal Methods: Avoid cyc contact. Precessions and Safe Handling: Avoid repeated prolonged contact with skin. Careful bathing and clean clothes are indicated after EXDOSUTE. Avoid prolonged or repeated breathing of wood dust in air. Avoid contact with oxidizing agents and drying oils. -Avoid open fiame. CONTROL MEASURES Wear goggies or safety glasses and other protective equipment such as gloves and NIOSH approved Personal Protective Equipment: breathing protection for exposure to wood dust. Respirators are required if air contamination's exceed ACGIH ILV. Provide adequate general and local exhaust ventilation to maintain healthful working conditions. Due to Ventilation. the explosive potential of wood dust when suspended in air, precautions should be taken to prevent sparks or other ignition sources in ventilation equipment. Supersedes Date Prepared by Manufacturer Name and Address Effective Date Staff 08-18-95 05-30-97 Liberty Woods International, Inc. Agent for various Indonesian, Brezilian, Malaysian Plywood Mills 1901 Camino Vida Roble, Suite #200 Carlsbad, CA 92008 IMPORTANT

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