

PHONE (503) 231-8881 FAX #(503) 236-5614

Product Names: Imported Hardwood Plywood (Urea-Formaldehyde Bonded)

Synonyms: None

<u>Trade Name:</u> Birch, Poplar, Meranti, Okoume

Description: This panel product contains a hardwood veneer face

(occasionally a decorative softwood face) bonded to wood components such as other wood veneer, particleboard, or medium density fiberboard (MDF) using urea-formaldehyde

resin.

Potential Airborne Releases: The product may release small quantities of formaldehyde

(CAS No. 50-00-0) in gaseous form. Emissions decrease through time as the panels age. Manual or mechanical cutting or abrasion processes performed on the product can result in

generation of wood dust.

Physical Data:

Boiling Point Not applicable

Specific Gravity (H2O = 1) <1

Vapor Density Not applicable

% Volatiles By Vol. 0

Melting Point Not applicable
Vapor Pressure Not applicable

Solubility in H2O (% by wt.) <0.1%

Evaporation Rate (Buty1 Acetate = 1) Not applicable PH Not applicable

Appearance and Odor Light to dark color. Color and odor are dependent upon wood

species.

^{*}This fact sheet is for products that have not been finished (coated, laminated, or overlaid) or treated (for example, with preservative or fire retardant).



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Fire And Explosion Data:

Flash Point Not applicable

Auto Ignition Temperature Not available (will depend upon duration of exposure to heat

source and other variables)

Explosive Limits in Air See below under "Unusual Fire and Explosion Hazards"

Extinguishing Media Water, Carbon dioxide, Sand

Special Fire Fighting Procedures None

Unusual Fire and Explosion Hazards Sawing, sanding or machining can produce dust as a by-

product, which may present an explosion hazard if a dust cloud contacts an ignition source. An airborne concentration of 40 grams of dust per cubic meter of air is often used as the

LEL for wood dust.

Reactivity Data:

Conditions Contributing to Instability Stable under normal conditions.

Incompatibility Avoid contact with oxidizing agents. Avoid open flame.

Product may ignite in excess of 400° F.

Hazardous Decomposition Products Thermal and/or thermal oxidative decomposition can

produce irritating and toxic fumes and gases, including carbon monoxide, hydrogen cyanide, aldehydes, organic

acids and polynuclear aromatic compounds.

Hazardous Polymerization Not applicable

Health Effects Information:

Exposure Limits:

Formaldehyde OSHA PEL-TWA 0.75 ppm

OSHA PEL-STEL 2 ppm

ACGIH TLV-CEILING 0.3 ppm

Wood Dust (all soft and hard woods except Western red cedar)

OSHA PEL-TWA 5mg/m3
OSHA PEL-STEL 10mg/m3



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Wood Dust (Western red cedar) Wood Dust (Softwood) Wood Dust (certain hardwoods such as beech and oak) Eye Contact	OSHA PEL-TWA 2.5mg/m3 ACGIH TLV-TWA 5mg/m3 ACGIH TLV-TWA 1mg/m3 Gaseous formaldehyde may cause temporary irritation or a burning sensation. Wood dust can cause mechanical
Skin Contact	irritation. Both formaldehyde and various species of wood may evoke allergic contact dermatitis in sensitized individuals.
Ingestion	Not likely to occur.
Inhalation:	
Gaseous Formaldehyde	May cause temporary irritation to eyes, nose, and throat. Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and that preexisting respiratory disorders may be aggravated by exposure. Formaldehyde is listed by the International Agency for Research on Cancer (IARC) as a probable human carcinogen. The National Toxicology Program (NTP) includes formaldehyde in the Annual Report on Carcinogen. Formaldehyde is regulated by OSHA as a potential cancer agent. In studies involving rats, formaldehyde has been shown to cause nasal cancer after long-term exposure to very high concentration (14+ppm). Far above those normally found in the workplace using this product. The National Cancer Institute (NCI) conducted an epidemiological study of industrial workers exposed to formaldehyde (published June 1986). The NCI concluded that the data provides little evidence that mortality from cancer is associated with formaldehyde exposure at the levels experienced by workers in the study.



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Wood Dust May cause nasal dryness, irritation and obstruction.

Coughing, wheezing and sneering, sinusitis and prolonged

colds have also been reported.

Depending on species, may cause respiratory sensitization and/or irritation. Prolonged exposure to wood dust has been reported by some observers to be associated with nasal cancer. Wood dust is not listed as a carcinogen by IARC,

NTP, or OSHA.

Generally Applicable Control Measure:

Formaldehyde Provide adequate ventilation to reduce the possible buildup

of formaldehyde gas, particularly when high temperatures

occur.

Wood Dust Avoid dusty conditions and provide good ventilation.

Generally Applicable Control Measure:

Ventilation Provide adequate general and local exhaust ventilation to

keep airborne contaminant concentration levels below the

OSHA PELs.

Personal Protective Equipment Wear goggles or safety glasses when manufacturing or

machining the product. Wear NIOSH/MSHA approved respirator when the allowable exposure limits may be exceeded. Other protective equipment such as gloves and

other garments may be needed on dust conditions.

Emergency And First Aid Procedures:

Eyes Flush eyes with large amounts of water. Remove to fresh

air. If irritation persists, get medical attention.

Skin Wash affected areas with soap and water. Get medical

advise if rash or persistent irritation or dermatitis occurs.

Inhalation Remove to fresh air. Get medical advise if persistent

irritation, severe coughing or breathing difficulty occurs.