

- STATES INDUSTRIES, INC. -

MATERIAL SAFETY DATA SHEET

HARDWOOD PLYWOOD

SECTION 1 PRODUCT IDENTIFICATION

PRODUCT NAME AND SYNONYMS: Hardwood Plywood
Urea Formaldehyde Bonded

SYNONYMS: None

TRADE NAME: ApplePly®
ArmorCore®
PolyWood
Library Panel®
Lightline
Stateline
Coastline
Beaded
Ambassador
Project Hardwoods

DESCRIPTION

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 (Butyl Acetate = 1) Not applicable

pH Not applicable

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

FIRE AND EXPLOSION DATA

Flash point Not applicable

Autoignition 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 wood 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 lower explosive limit (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 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	5 mg/m ³
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Wood Dust (Western red cedar)	OSHA PEL - TWA	2.5 mg/m ³
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Wood Dust (Softwood)	ACGIH TLV - TWA	5 mg/m ³
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Wood Dust (certain hardwoods such as Beech and Oak)	ACGIH TLV - TWA	1 mg/m ³
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Eye Contact Gaseous formaldehyde may cause temporary irritation or a burning sensation. Wood dust can cause mechanical irritation.

Skin Contact Both formaldehyde and various species of wood dust 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 pre-existing 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 Carcinogens. 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 concentrations (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.

Wood Dust

May cause nasal dryness, irritation and obstruction. Coughing, wheezing, and sneezing; 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.

PRECAUTIONS, SAFE HANDLING

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 MEASURES

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 outer garments may be needed depending 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 advice if rash or persistent irritation or dermatitis occurs.
Inhalation	Remove to fresh air. Get medical advice if persistent irritation, severe coughing or breathing difficulty occurs.
Ingestion	Not applicable.

<u>Manufacturer Name and</u>	<u>Effective Date</u>	<u>Supersedes Date</u>	<u>Prepared By</u>
States Industries, Inc. P.O. Box 7037 Eugene, OR 97401	8/1/92	N/A	R. Gail Overgard Vice President of Operations

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