## MATERIAL SAFETY DATA SHEET

White birch face and back acacia core Plywood PRODUCT IDENTIFICATION: (Urea-Formaldehyde Bonded)\* None SYNONYMS: Plywood TRADE NAME: **DESCRIPTION** This panel product contains white birch veneer face bonded to acacia core platform using phenol-formaldehyde/ urea-formaldehyde resin. POTENTIAL AIRBORNE RELEASES Manual or mechanical cutting or abrasion processes performed on the product can result in generation of wood dust. PHYSICAL DATA Boiling Point..... Not applicable < 0.38 Specific Gravity  $(H_2O = 1)$ ..... Not applicable Vapor Density..... % Volatiles By Vol..... Not applicable Melting Point..... Not applicable Vapor Pressure..... < 0.1% Solubility in H<sub>2</sub>O (% by wt.)..... Not applicable Evaporation Rate (Butyl Acetate = 1)... Not applicable PH..... Light to dark color. Color and odor Appearance 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). FIRE AND EXPLOSION DATA Not applicable Flash point..... Not available (will depend upon duration of exposure to Autoignition Temperature..... heat source and other variables) See below under "Unusual Fire and Explosion Hazards" Explosive Limits in Air. Water, Carbon dioxide, Sand Extinguishing Media.... Special Fire Fighting Procedures...... None Unusual Fire and Explosion Sawing, sanding or machining can produce wood dust as Hazards..... 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 Stable under normal conditions. Instability..... Incompatibility..... Avoid contact with oxidizing agents. Avoid open flame. Procuct 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

Hazardous Polymerization
<b>HEALTH EFFECTS INFORMATION</b>
Exposure Limits:
Formaldehyde
•
Wood Dust (all soft and hard
Woods except Western red cedar)
Wood Dust (Western red cedar)
Wood Dust (Softwood)
Wood Dust (certain hardwoods such
as beech and oak)
Eye Contact
Lyc contact
Skin Contact.
Skill Colliact
<b>T</b>
Ingestion
Inhalation:
Gaseous formaldehyde

acids and polynuclear aromatic compounds. Not applicable

OSHA PEL - TWA 0.05 ppm OSHA PEL - STEL 0.05 ppm ACGIH TLV - CEILING 0.05 ppm

OSHA PEL - TWA 5mg/m³ OSHA PEL - STEL 10mg/m³ OSHA PEL - TWA 2.5mg/m³ ACGIH TLV - TWA 5mg/m³

ACGIH TLV - TWA 1mg/m<sup>3</sup>

Gaseous formaldehyde may cause temporary irritation or a burning sensation. Wood dust can cause mechanical irritation.

Both formaldehyde and various species of wood dust may evoke allergic contact dermatitis in sensitized individuals.

Not likely to occur.

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