COMPANY: SUPERIOR LUMBER CO. (Lumber, Plywood & Veneer Divisions)

ADDRESS: PO Box 250, Glendale, OR

PH: 503-832-1121

WOOD DUST
CAUTION!

SAWING, SANDING OR MACHINING WOOD PRODUCTS CAN PRODUCE WOOD DUST WHICH CAN CAUSE A FLAMMABLE OR EXPLOSIVE HAZARD.

WOOD DUST MAY CAUSE LUNG, UPPER RESPIRATORY TRACT, EYE AND SKIN IRRITATION. SOME WOOD SPECIES MAY CAUSE DERMATITIS AND/OR ALLERGIC RESPIRATORY EFFECTS. THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) HAS CLASSIFIED WOOD DUST AS A NASAL CARCINOGEN IN HUMANS.

* Avoid dust contact with ignition source.
* Sweep or vacuum dust for recovery or disposal.
* Avoid prolonged or repeated breathing of wood dust in air.
* Avoid dust contact with eyes and skin.

* **FIRST AID:** If inhaled, remove to fresh air. In case of contact, flush eyes and skin with water. If irritation persists, call a physician.

For additional information, see the Material Safety Data Sheet.

MATERIAL SAFETY DATA SHEET

WOOD DUST

Company Name, Address

SUPERIOR LUMBER CO.
(Lumber, Plywood & Veneer Divisions)
PO Box 250
Glendale, OR 97442
PH: 503-832-1121

TRADE NAME: Wood Dust
SYNONYMS: None
CAS. NO.: None
DESCRIPTION: Particles generated by any manual or mechanical cutting or abrasion process performed on wood.

PHYSICAL DATA

Boiling Point .....Not Applicable
Specific Gravity.....Variable
(Dependent on wood species and moisture content).
Vapor Density.....Not Applicable
% Volatiles by Volume.....Not Applicable
Melting Point.....Not Applicable
Vapor Pressure.....Not Applicable
Solubility in H_2O (% by wt.).....Insoluble
Evaporation Rate - (Butyl Acetate=1).....Not Applicable
pH.....Not Applicable
Appearance & Odor.....Light to dark colored granular solid
Color and odor are dependent on the wood species and time since dust was generated.

FIRE & EXPLOSION DATA

Flash Point.....Not Applicable
Autoignition Temperature.....Variable
(typically 400-500°F)
Explosive Limits in Air.....40 grams/m^3 (LEL)
Extinguishing Media.....Water, CO_2, Sand
Special Fire Fighting Procedures.....Wet down with water
Wet down wood dust to reduce likelihood of ignition or dispersion of dust into the air. Remove burned or wet dust to open area after fire is extinguished.
Unusual Fire & Explosion Hazard.....Strong to severe explosion hazard
(if wood dust "cloud" contacts an ignition source)

HEALTH EFFECTS DATA

Exposure Limit.....ACGIH TLV(R): TWA - 5.0 mg/m^3; $STEL_{(15\ min.)}$ - 10 mg/m^3 (softwood) TWA - 1.0 mg/m^3; (certain hardwoods such as beech and oak) OSHA PEL: TWA (see Footnote 1) - (total dust) - 15.0 mg/m^3 (respirable factor) - 5.0 mg/m^3
Skin & Eye Contact.....Eye Irritation & Allergic Contact Dermatitis
(Wood dust can cause eye irritation. Various species of wood dust can elicit allergic contact dermatitis in sensitized individuals)
Ingestion.....Not Applicable
Skin Absorption.....Not known to occur
Inhalation.....May cause:
nasal dryness, irritation & obstruction. Coughing, wheezing, & sneezing: sinusitis & prolonged colds have also been reported.
Chronic Effects.....May cause:
Wood Dust, depending on species, may cause dermatitis on prolonged repetitive contact; may cause respiratory sensitization and/or irritation. 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 sinuses 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.

REACTIVITY DATA

Conditions Contributing to Instability.....Stable
(under normal Conditions)

Incompatibility.....Avoid Contact with:
oxidizing agents, drying oils and flame. Product may ignite at temperatures in excess of 400° F.

Hazardous Decomposition Products.....Thermal-oxidative degradation of wood produces:
irritating & toxic fumes and gases, including CO, aldehydes and organic acids.

Conditions Contributing to Polymerization.....Not Applicable

PRECAUTIONS AND SAFE HANDLING

Eye Contact.....Avoid

Skin Contact.....Avoid:
Repeated or Prolonged Contact with Skin. Careful bathing and Clean clothes are indicated after exposure.

Inhalation.....Avoid:
Prolonged or Repeated breathing of Wood Dust in Air.

Oxidizing agents and drying oils.....Avoid contact

Open flame.....Avoid

GENERALLY APPLICABLE CONTROL MEASURES

Ventilation.....Provide:
adequate general and local exhaust ventilation to maintain healthful working conditions.

Safety Equipment.....Wear goggles or safety glasses.
Other protective equipment such as gloves and approved dust respirators may be needed depending upon dust conditions.

EMERGENCY AND FIRST AID PROCEDURES

Eyes.....Flush with water
to remove dust particles. If irritation persists, get medical attention.

Skin.....Get Medical advice
If a rash or persistent irritation or dermatitis occur, get medical advice where applicable before returning to work where wood dust is present.

Inhalation.....Remove to fresh air.
If persistent irritation, severe coughing, breathing difficulties occur, get medical advice before returning to work where wood dust is present.

Ingestion..... Not Applicable

SPILL/LEAK CLEAN-UP PROCEDURES

Recovery or Disposal.....Clean-up:
Sweep or vacuum spills for recovery or disposal; avoid creating dust conditions. Provide good ventilation where dust conditions may occur. Place recovered wood dust in a container for proper disposal.

FOOTNOTE

Footnote 1: In AFL-CIO v. 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. The 1989 PELs were: TWA - 5.0 mg/m³; STEL (15 MIN.) - 10.0 mg/m³ (ALL SOFT AND HARD WOODS, EXCEPT WESTERN RED CEDAR); WESTERN RED CEDAR: TWA - 2.5 mg/m³. Wood 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, a number of states have incorporated provisions of the 1989 standard in their state plans.

IMPORTANT

MATERIAL SAFETY DATA SHEET

Arclin
Performance Applied

Arclin USA, Inc.
475 North 28th Street • Springfield OR 97477 • CHEMTREC 800-424-9300
Emergency Telephone (541) 746-6501

Issued August 27, 2007 • supercedes August 3, 2004 A.8

PRODUCT IDENTIFICATION

Product Name: 14B346, Liquid Phenol Formaldehyde Resin
Chemical Name: Phenol-Formaldehyde Polymer.
CAS Number: 9003-35-4 PIN: Not TDG Regulated
NFPA Classification: Health: 1; Flammability: 1; Instability: 0

HAZARDOUS COMPONENTS

Formaldehyde, CAS No. 50-00-0, <0.10% by weight as free formaldehyde.
Exposure Limits: OSHA; 0.75 ppm 8 hour TWA, 2.0 ppm STEL. ACGIH; 0.3 ppm Ceiling.
Toxicity: skn-rbt LD_{50}: 270 mg/kg; orl-rbt DL_{50}: 100 mg/kg; inh-rat LC_{50}: 200 mg/m^3/4h
Warning: Formaldehyde is classified as an IARC Group I Human carcinogen (nose and pharynx) and a potential human carcinogen by NTP and OSHA. It is irritating and potentially harmful to the eyes, skin, and respiratory system and may cause skin allergies to sensitive individuals.

EMERGENCY OVERVIEW

Pale red-brown to maroon liquid with faint aromatic odor. Dangerous if ingested. May cause irritant dermatitis to skin. Can cause irritation to eyes. Do not store near strong acids or alkalies. Formaldehyde is classified as an IARC Group I Human carcinogen (nose and pharynx) and a potential human carcinogen by NTP and OSHA.

HAZARDS IDENTIFICATION

Exposure Effects
Eyes: may cause irritation.
Inhalation: may cause mild irritation to mucous membranes, upper respiratory tract and lungs.
Ingestion: Dangerous if ingested. Causes irritation to mouth, esophagus, stomach, and other contacted tissues.
Skin: may cause dermatitis.

FIRST AID

Treat as an emergency - never give anything to an unconscious person.
Eyes: irrigate with a gentle stream of water, for at least fifteen minutes. Secure medical attention.
Inhalation: remove patient to fresh air, keep warm and quiet. Use oxygen if required. Secure medical attention.
Ingestion: do **NOT** induce vomiting. Wash mouth. If conscious administer 8 oz (240 ml) of milk or water. Secure medical attention immediately. If vomiting occurs, administer fluids above again. If unconscious or in convulsions, secure transportation to a hospital immediately
Skin: remove contaminated clothing, flush contaminated skin with water and wash with mild soap.

FIRE FIGHTING

Fire Fighting Procedure: use water spray, dry chemical, foam, or CO_2. Use water spray to cool containers. Keep product out of sewers and public waters.
Special equipment required: wear full protective clothing and NIOSH or National Standard CAN/CSA 94.4 – 93 approved self-contained breathing apparatus.
Hazardous combustion products: may be formaldehyde and oxides of carbon, nitrogen, sodium, and potassium.

ACCIDENTAL RELEASE PROCEDURES

Large spills or leaks should be confined by diking so as to prevent entry into natural waters. Minimal quantities of water should be used to wash spilled materials to waste storage or sumps. Recovered material may be recycled after proper adjustment in product use. Spilled material may be recovered with sorbent material. Dispose of sorbents in compliance with all Federal, Provincial, State and local regulations. Check the pH of the waste to verify that it is NOT a RCRA hazardous waste.

HANDLING AND STORAGE

Store in cool place. Rotate stock to use oldest first. Do not store near strong acids. Avoid contact with magnesium, aluminum, zinc (galvanized), tin, chromium, brass and bronze. Contact with these materials may generate hydrogen, which is explosive.

EXPOSURE CONTROLS AND PERSONAL PROTECTION

Respiratory protection: exposure should be minimized by engineering or administrative controls so as to prevent overexposure. In the absence of suitable controls and/or if overexposure may occur, wear a NIOSH or National Standard CAN/CSA 94.4 – 93 approved respirator suitable for formaldehyde.
Eyes: chemical safety goggles are recommended.
Skin: avoid repeated or prolonged skin contact. Wash hands and face with soap and water prior to eating or drinking. Wear chemical resistant gloves such as rubber of neoprene if handling in open containers.

PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Amber to maroon or brown	Odor: faint Formaldehyde or phenolic	Physical State: Liquid
pH: 8.0 – 12.5	Vapor Pressure: Not available	Vapor Density: Not available
Boiling Point: ~ 100°C (212°F)	Freezing Point: 0°C (32°F)	Specific Gravity: 1.1 - 1.3
Evaporation Rate: of water	Coefficient of oil/water distr.: Not applicable	Flash Point: >200°F
Odor Threshold: Not available	Volatile Wt%: 40 - 65%	

STABILITY AND REACTIVITY

Exposure to elevated temperatures or strong acids will cause rapid, but non-explosive, polymerization with evolution of formaldehyde and water.

TRANSPORTATION INFORMATION

Canada	USA
Not TDG Regulated	<100,000 lbs – Not regulated

REGULATORY INFORMATION

SARA Title III
Section 304 emergency notification substances contained: none.
Section 311/312 hazard categories: acute hazard, chronic hazard.
Section 313 emissions reporting: none

Canadian WHMIS Classification: D2A, D2B WHMIS Label Code: 134
Prepared by Arclin, HSE Group, Telephone: 905-712-0900

Attn: John

MATERIAL SAFETY DATA SHEET

Dynea USA, Inc.
475 North 28th Street • Springfield OR 97477 • CHEMTREC 800-424-9300
Emergency Telephone (541) 746-6501

Issued August 3, 2004 – supercedes February 16, 2004 A.8

PRODUCT IDENTIFICATION

Product Name: Prefere™ 14B388, Liquid Phenol Formaldehyde Resin
Chemical Name: Phenol-Formaldehyde Polymer.
CAS Number: 9003-35-4 PIN: Not TDG Regulated
NFPA Classification: Health: 1; Flammability: 1 ; Instability: 0

HAZARDOUS COMPONENTS

Formaldehyde, CAS No. 50-00-0, <0.10% by weight as free formaldehyde.
Exposure Limits: OSHA; 0.75 ppm 8 hour TWA, 2.0 ppm STEL. ACGIH; 0.3 ppm Ceiling.
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Prepared by Dynea, HSE Group, Telephone: 541-687-8840