



Manufacturer Name and Address:
Weyerhaeuser Company
Tacoma, WA 98477



Material Safety Data Sheet

FR

Weyer
6-29-9

1 PRODUCT IDENTIFICATION

Product	Manufacturing Location	Telephone Numbers	
		Emergency	Information
FR	Grayling, MI	(517) 348-2881 (24 hours)	(517) 348-2881

Synonyms: Fireboard, Fire Retardant Structurwood® Date Prepared: 10/27/87 Date Revised: 6/26/89 Prepared By: Corporate Safety & Health Services

2 HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Chemical or Common Name/ CAS#	Percent	Exposure Limits	
Wood CAS# None	74.5	OSHA PEL-TWA	5 mg/m ³ (a)
		OSHA PEL-STEL	10 mg/m ³ (a)
		OSHA PEL-TWA	2.5 mg/m ³ (b)
		ACGIH TLV-TWA	5 mg/m ³ (c)
		ACGIH TLV-STEL	10 mg/m ³ (c)
		ACGIH TLV-TWA	1 mg/m ³ (d)
		WISHA PEL-TWA	5 mg/m ³ (e)
Flame Retardant (*) CAS# None	20	OSHA PEL-TWA	None
		ACGIH TLV-TWA	None
Resin Solids (phenol formaldehyde) CAS# None	6.5	OSHA PEL-TWA	1 ppm (g)
		OSHA PEL-STEL	2 ppm (g)
		ACGIH TLV-TWA	1 ppm (g)
		ACGIH TLV-STEL	2 ppm (g)
		WISHA PEL-C	1 ppm (g)
		OREGON PEL-TWA	1 ppm (g)
		OREGON PEL-STEL	2 ppm (g)

- (*) trade secret
 (a) softwood or hardwood total dust
 (b) western red cedar total dust
 (c) softwood total dust
 (d) selected hardwood total dust; beech, oak
 (e) non-allergenic total dust
 (f) allergenic total dust
 (g) free gaseous formaldehyde

Appearance and Odor:

A ligno cellulosic matrix of interlocking wood flakes, having a slightly aromatic odor.

The wood component may consist of alder, aspen, beech, birch, cottonwood, fir, gum, hemlock, hickory, lauan, maple, oak, pecan, pine, poplar, spruce, walnut and/or western red cedar.

3 PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT (F or C):	NAP
VAPOR PRESSURE (mm Hg):	NAP
VAPOR DENSITY (AIR = 1):	NAP
SPECIFIC GRAVITY (H ₂ O=1):	0.40 - 0.80
MELTING POINT (F or C):	NAP
EVAPORATION RATE (BUTYL ACETATE = 1):	NAP
SOLUBILITY IN WATER:	<0.1%
% VOLATILE BY VOLUME @ 70°F:	0

4 FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): NAP
Flammable Limits: LEL: See below under "Unusual Fire and Explosion Hazards" UEL: NAP
Extinguishing Media: Water, carbon dioxide, sand
Autoignition Temperature (F or C): 400°-500°F
Special Firefighting Procedures: None
Unusual Fire and Explosion Hazards: Depending on moisture content and, more importantly, particle diameter, wood dust may explode in the presence of an ignition source. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dusts.

5 REACTIVITY DATA

Stability:

() Unstable (x) Stable
 Conditions to Avoid: NAP

Incompatibility (Materials to Avoid):

Avoid contact with oxidizing agents. Avoid open flame. Product may ignite at temperatures in excess of 400°F.

Hazardous Decomposition or By-Products:

Thermal decomposition products include carbon monoxide, carbon dioxide, aliphatic aldehydes, rosin acids, terpenes, and polycyclic aromatic hydrocarbons.

Nitrogen oxides may also be released upon combustion. Ammonia or melamine may be released upon decomposition.

Hazardous Polymerization:

() May Occur (x) Will Not Occur
 Conditions to Avoid: NAP



6 PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled:

Not applicable for product in purchased form. Wood dust generated from sawing, sanding, drilling or routing of this product may be vacuumed or shoveled for recovery or disposal. Avoid dusty conditions and provide good ventilation. Use NIOSH/MSHA-approved respirator and goggles where ventilation is not possible.

Waste Disposal Method:

If disposed of or discarded in its purchased form, incineration is preferable. Dry land disposal is acceptable in most states. It is, however, the user's responsibility to determine at the time of disposal whether your product meets RCRA criteria for hazardous waste. Follow applicable federal, state or local regulations.

Precautions to be Taken in Handling and Storage:

No special handling precautions are required. This product will release gaseous formaldehyde in amounts below the health hazard level (0.10 ppm) determined by OSHA. Store in well-ventilated, cool, dry place away from open flame.

Other Precautions:

A NIOSH/MSHA-approved respirator and goggles should be worn when the allowable exposure limits may be exceeded.

7 HEALTH HAZARD DATA

Primary Health Hazard(s):

The primary health hazards posed by this product are thought to be due to exposure to wood dust.

Primary Route(s) of Exposure:

- () Ingestion
- (x) Skin: Dust
- (x) Inhalation: Dust

Acute Health Hazards:

Signs and symptoms of exposure; emergency and first aid procedures:

INGESTION:

Not applicable under normal use.

EYE CONTACT:

Wood dust may cause mechanical irritation.

Treat dust in eye as foreign object. Flush with water to remove dust particle.

Get medical help if irritation persists.

SKIN CONTACT:

Wood dust(s) of certain species may elicit allergic contact dermatitis in sensitized individuals, as well as mechanical irritation resulting in erythema and hives.

Get medical help if rash, irritation or dermatitis persists.

SKIN ABSORPTION:

Not known to occur under normal use.

INHALATION:

Wood dust may cause unpleasant deposit/obstruction in the nasal passages, resulting in dryness of nose, dry cough, and headaches.

Remove to fresh air. Get medical help if persistent irritation, severe coughing or breathing difficulty occurs.

Medical Conditions Generally Aggravated by Exposure:

Wood dust may aggravate preexisting respiratory conditions or allergies.

Chronic Health Hazards:

Wood dust(s), depending on the species (for example, iroko, cocobolo), may cause allergic contact dermatitis with prolonged, repetitive contact, and respiratory sensitization after prolonged exposure to elevated dust levels (for example, western red cedar). Wood dust has been alleged to cause nasal/paranasal sinus cancer (certain European hardwoods: oak and beech).

Carcinogenicity Listing:

- (x) NTP: Formaldehyde
- (x) IARC Monographs: Formaldehyde
- (x) OSHA Regulated: Formaldehyde

8 CONTROL MEASURES

Personal Protective Equipment:

RESPIRATORY PROTECTION:

Not applicable for product in purchased form. A NIOSH/MSHA-approved respirator is recommended when the allowable exposure limits may be exceeded.

PROTECTIVE GLOVES:

Not required. However, cloth, canvas or leather gloves are recommended to minimize potential mechanical irritation from handling product.

EYE PROTECTION:

Not applicable for product in purchased form. Goggles or safety glasses are recommended when machining this product.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Not applicable for product in purchased form. Outer garments may be desirable in extremely dusty areas.

WORK/HYGIENIC PRACTICES:

Follow good hygienic and housekeeping practices. Clean up areas where wood dust settles to avoid excessive accumulation of this combustible material. Minimize blowdown or other practices that generate high airborne-dust concentrations.

Ventilation:

LOCAL EXHAUST:

Provide local exhaust as needed so that exposure limits are met.

MECHANICAL (GENERAL):

Provide general ventilation in processing and storage areas as needed so that exposure limits are met.

SPECIAL:

Self-contained breathing apparatus (SCBA) recommended when fighting fire.

OTHER: NAP

9 USER'S RESPONSIBILITY

The information contained in this Material Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if this information is suitable for their applications and to follow safety precautions as may be necessary. The user has the responsibility to make sure that this sheet is the most up-to-date issue.

10 ADDITIONAL INFORMATION

Definition of Common Terms:

ACGIH	=	American Conference of Governmental Industrial Hygienists
C	=	Ceiling Limit
CAS#	=	Chemical Abstracts System Number
IARC	=	International Agency for Research on Cancer
MSHA	=	Mining Safety and Health Administration
NAP	=	Not Applicable
NAV	=	Not Available
NIOSH	=	National Institute for Occupational Safety and Health
NTP	=	National Toxicology Program
OSHA	=	Occupational Safety and Health Administration
PEL	=	Permissible Exposure Limit
STEL	=	Short-Term Exposure Limit (15 minutes)
TLV	=	Threshold Limit Value
TWA	=	Time-Weighted Average (8 hours)
WISHA	=	Washington Industrial Safety and Health Administration