



## Material safety data sheet

### 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 (Butyl 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).

### 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 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.
Hazards 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 OSHA PEL-TWA 5 mg/m <sup>3</sup> woods except Western red cedar)	OSHA PEL-STEL 10 mg/m <sup>3</sup>
Wood Dust (certain hardwoods such as beech and oak) ACGIH TLV-TWA 1 mg / m <sup>3</sup> Eye Contact Skin Contact	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.
Ingestion	Not likely to occur.



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 Carcinogens. Formaldehyde is regulated by OSHA as a potential cancer agent.

In studies involving rats, formaldehyde has been shown to cause nasal cancer after longterm exposure to very high concentrations (14+ppm), far above those normally found in the work place 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 occur.
Inhalation	Remove to fresh air. Get medical advice if persistent irritation, severe coughing or breathing difficulty occurs.
Ingestion	Not applicable

## Disclaimer

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