

Veneer Technologies
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WOOD AND WOOD PRODUCTS
(NON UREA-FORMALDEHYDE BONDED)
MATERIAL SAFETY DATA SHEET
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SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME.....Wood and Wood Products
 (Non Urea-Formaldehyde Bonded)

MANUFACTURER/DISTRIBUTOR:

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SECTION II - HAZARDOUS INGREDIENTS

None, however, sawing, sanding or machining wood products can produce wood dust as a byproduct.

SECTION III - PHYSICAL PROPERTIES

APPEARANCE AND ODOR. Light to dark colored granular solid.
 Color and odor is dependent on the wood species.
 MOLECULAR WEIGHT..... Not Applicable
 BOILING POINT (DEGREES FAHRENHEIT)..... Not Applicable
 MELTING POINT (DEGREES FAHRENHEIT)..... Not Applicable
 VAPOR PRESSURE (MM OF MERCURY)..... Not Applicable
 SPECIFIC GRAVITY (WATER = 1)..... <1
 VAPOR DENSITY (AIR = 1)..... Not Applicable
 PERCENT VOLATILE (BY WEIGHT)..... Not Applicable
 pH..... Not Applicable
 SOLUBILITY IN WATER..... Insoluble
 EVAPORATION RATE (BUTYL ACETATE = 1)..... Not Applicable

SECTION IV - FIRE AND EXPLOSION DATA

UNUSUAL FIRE AND EXPLOSION HAZARDS: Sawing, sanding or machining wood products can produce wood dust as a byproduct. Wood dust is a strong to severe explosion hazard if a dust "cloud" contacts an ignition source. Partially burned dust is especially hazardous if dispersed in air. 212 degrees Fahrenheit has been suggested as the upper temperature limit for continuous exposure for wood without risk of ignition. (Wood dust may require a still lower temperature). An airborne concentration of 40 grams of dust per cubic meter of air is often used as the lowest explosion limit (LEL) for wood dust.

FLASH POINT Not Applicable

FIRE EXTINGUISHING MEDIA: Use a water spray to wet down wood dust to reduce the likelihood of ignition or dispersion of dust into the air. Remove burned or wet dust to open area after fire is out.

SECTION V - REACTIVITY DATA

STABILITY..... Stable
 INCOMPATIBILITY (MATERIALS TO AVOID): Oxidizing agents and drying oils.
 HAZARDOUS DECOMPOSITION PRODUCTS: Thermal-oxidative degradation of wood produces irritating and toxic fumes and gases including carbon monoxide, aldehydes and organic acids.
 HAZARDOUS PLOYMERIZATION..... Will not occur
 CONDITIONS TO AVOID: Wood dust is extremely combustible. Keep in cool, dry place away from ignition sources.

SECTION VI - HEALTH HAZARD INFORMATION

COMPONENT	ACGIH TLV	OSHA
Wood Dust (1)	5 mg/m3(2) 10 mg/m3(3)	5 mg/m3(2) 10 mg/m3(3)
Wood Dust (4)	NA	2.5 mg/m3(2)
Wood Dust (5)	1 mg/m3(2)	NA

- (1) All soft and most hardwoods except Western Red Cedar, Beech and Oak.
- (2) 8 Hour TWA.
- (3) STEL.
- (4) Western Red Cedar.
- (5) Certain hardwood such as Beech and Oak.
- NA = Not Applicable.

EFFECTS OF OVEREXPOSURE: Avoid prolonged or repeated breathing of wood dust in air. Repeated exposures (even below 5mg/m3) to certain wood dusts, such as western red cedar, can produce allergic responses in some sensitive individuals. Avoid repeated or prolonged contact with the skin, which can also cause allergic responses. If allergy, such as dermatitis, asthma, or bronchitis develops, it may be necessary to remove the sensitized worker from further exposure to wood dust (and also, perhaps to wood-based products like turpentine and resin.)

PROBABLE ROUTES OF EXPOSURE.....Inhalation, skin

EMERGENCY AND FIRST AID PROCEDURES:

INGESTION: Not applicable under normal use.
 INHALATION: Remove to fresh air. If persistent irritation, severe coughing, breathing difficulties, or rash occur, get medical advice before returning to work with wood dust.
 EYE CONTACT: Flush with water to remove dust particles from the eye. If irritation persists, get medical attention.
 SKIN CONTACT: If a rash, or persistent irritation or dermatitis occur, get medical advice before returning to work where wood dust is present.

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SECTION VII - TOXICITY DATA

ORAL.....Not Available

DERMAL: The chronic effects of skin contact with wood dust vary from one wood species to another, however, various species of wood dust can elicit allergic contact dermatitis in sensitized individuals.

INHALATION: Wood dust may cause nasal dryness, irritation, coughing and sinusitis. Prolonged exposure to certain species of wood dust has been associated with nasal cancer in British furniture workers.

CARCINOGENICITY: Listed as a nasal carcinogen by IARC.

OTHER PERTINENT DATA: Certain species of woods, e.g. boxwood, cashew, mahogany, western red cedar, yew, rosewood, salinwood, and teak, are known to cause skin, eye and upper respiratory tract irritation along with allergic responses and asthma (Patty, pg. 1218).

SECTION VIII - SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT

PROTECTIVE CLOTHING: Recommend gloves, as necessary, to reduce skin contact, except where moving machinery parts expose fingers to hazards. Recommend the use of outer garments to reduce exposure of skin to wood dust.

EYE PROTECTION: Recommend goggles or safety glasses as conditions indicate when machining this product.

RESPIRATORY PROTECTION (SPECIFIC TYPE): Recommend approved dust respirator as conditions indicate when machining this product.

* Protective equipment may be warranted at low exposure levels, depending on species of wood dust exposure.

VENTILATION

LOCAL EXHAUST: As necessary to meet OSHA requirements. Due to the explosive potential of wood dust when suspended in air, precautions should be taken to prevent sparks or other ignition sources in ventilation equipment. Use of totally enclosed motors is recommended.

SECTION IX - SPILL, LEAK AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Vacuum up dust for recovery or disposal. Avoid dusty conditions. Provide good ventilation. Place recovered wood dust in a container for proper disposal. Avoid sweeping to prevent creation of airborne dust.

WASTE DISPOSAL METHODS: Dispose in a landfill or incinerate. Follow applicable federal, state or local regulations.

SECTION X - REGULATORY INFORMATION

TSCA..... Not listed on TSCA inventory
DOT..... Not regulated

SECTION XI - SPECIAL PRECAUTIONS AND COMMENTS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Avoid hot, humid storage or contact with drying oils (spontaneous heating is possible). Partially burned or scorched wood dust can be hazardous to store.

Avoid generation of explosive levels of wood dust in the air.

Follow good housekeeping practices: vacuum up areas where wood dust settles to avoid excessive accumulation of this combustible material.

Follow good hygienic practices: wash hands frequently and wear clean work clothing.

EFFECTIVE DATE.....10/18/94 SUPERSEDES.....All Previous

IMPORTANT: The information and data herein are believed to be accurate and have been compiled from sources believed to be reliable. It is offered for your consideration, investigation and verification. Buyer assumes all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations.

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This Material Safety Data Sheet is being furnished for similar products produced by different manufacturers. Consult labels, stamps and markings on the product or packaging for the exact identity of the manufacturer.

Material Safety Data Sheet

5 Pages

I. Product Identification

Manufacturer's Name KIMBERLY-CLARK CORPORATION MUNISING MILL		Emergency Telephone No. (906) 387-2700
Address 501 East Munising Ave., Munising, MI 49862		
Chemical Name and Synonyms Mixture		CAS No./UN No. N/A
Trade Name and Synonyms BACKER SHEET		
Chemical Family Cellulose, Synthetic Polymer Composite	Formula Proprietary	
Shipping Name: DOT: Non-Hazardous		IATA:

II. Hazardous Ingredients

Material or Component	CAS No./UN No.	Hazard Data
Formaldehyde (A by-product of the Manufacturing process, normally crosslinked but can be released upon certain processing conditions)	50-00-0	< 0.2 TWA = 0.75 ppm STEL = 2.0 ppm Action Level = 0.5 ppm (8 hr. TWA)

III. Physical Data

Boiling Point N/A	Melting Point N/A
Specific Gravity (H ₂ O=1) 0.4 - 0.8	Vapor Pressure N/A
Vapor Density (Air = 1) N/A	Solubility in H ₂ O, % by wt. Less than 0.1%
% Volatiles by Vol. Less than 0.1%	Evaporation Rate (< 0.1 = 1) N/A
Appearance and Odor Manufactured paper article, insig. odor	pH (as is) pH at Dilution N/A

IV. Fire and Explosion Data

Flash Point (Test Method) None	Auto Ignition Temp. >200°F	Flammable Limits in Air, % by Vol.: None	Lower: Upper:
Extinguishing Media Water, CO₂, Dry Chemicals			
Special Fire Fighting Procedures NONE			
Unusual Fire and Explosion Hazard NONE			

V. Health Hazard Information

Health Hazard Data	Hazard Classification	Basis for Classification	Source
<p><u>Routes of Exposure</u> Inhalation</p>	<p>Trace amounts of formaldehyde vapors may be released upon certain heat processing conditions. Formaldehyde vapors are irritating to the eyes, skin, mucus membranes, respiratory tract. Repeated and excessive exposure to formaldehyde vapors can cause respiratory sensitization in some individuals. Excessive exposure to formaldehyde vapors creates a cancer risk to the respiratory systems of humans (based on animal testing).</p>		<p>OSHA 29 CFR 1910.1043</p>
<p>Skin Contact</p>	<p>Under normal conditions, skin contact of product has not been reported to elicit a response. Prolonged or repeated skin contact with formaldehyde solutions may cause some people to develop allergic rashes or other skin disorders.</p>		
<p>Skin Absorption</p>	<p>No exposure or adverse effects from available data on product.</p>		
<p>Eye Contact</p>	<p>Direct contact may cause eye irritation.</p>		
<p>Ingestion</p>	<p>No evidence of adverse effects from available data on product.</p>		

Effects of Overexposure

Acute Overexposure

None reported for product.

Chronic Overexposure

None reported for product.

Emergency and First Aid Procedures

Eyes

Immediately flush eyes with water.

skin

No harmful effects anticipated.

Inhalation

Ingestion

No harmful effects anticipated.

Notes to Physician

[Empty box for notes to physician]

VI. Reactivity Data**Conditions Contributing to Instability**

None known

Incompatibility (Materials to Avoid)

None known

Hazardous Decomposition Products

Processing of this product may cause release of formaldehyde vapors under conditions of heat and pressure. These levels may exceed exposure concentrations of TWA of 0.1 ppm.

Conditions Contributing to Hazardous Polymerization

Not known

VII. Spill or Leak Procedures**Steps to be Taken if Material is Released or Spilled**

N/A

Neutralizing Chemicals

N/A

Waste Disposal Method of Spill or Leak

N/A

VIII. Special Protection Information**Ventilation Requirements**

Maintain adequate ventilation under conditions of use to prevent exposure above the current OSHA limits. It is recommended that work place monitoring of the air be instituted to define formaldehyde exposure levels.

Specific Personal Protective Equipment**Respiratory (Specify in Detail)**

Where respiratory protection is required, approved respirator for formaldehyde gas exposure (see 29 CFR 1910.1048(g)).

Eye

Where eye protection is required, approved safety glasses.

Gloves

Where dermal exposure is expected, appropriate protection of exposed areas should be covered.

Other Clothing and Equipment

N/A

X. Special Precautions

Labeling Information and Warnings

Danger
Formaldehyde
Irritant and Potential Cancer Hazard
Avoid Inhalation and Skin Contact.

Data for Hazardous Information Label

<u>Hazard Code</u>	<u>Flammability</u>	1
4 = Extreme	<u>Reactivity</u>	0
3 = High	<u>Health</u>	3
2 = Moderate	<u>Special</u>	N/A
1 = Slight		
0 = Insignificant		

Other Handling and Storage Requirements

Storage of material should be kept in a well ventilated area.

X. Disposal

Waste Disposal Method

Dispose of product in accordance with local, state and federal regulations.

Aquatic Toxicity (eg. 96 hr TLH):

XI. Government Regulations

Reference to Applicable Government Regulations

Federal
OSHA 1910.1048

State
Pennsylvania
Massachusetts
California

Other

Regulation Highlights

Formaldehyde exposure levels, mandatory and employee notification.

A special hazardous substance greater than 0.01%.
Extraordinary hazardous substance greater than 1 ppm.
A substance listed by California under the "Safe Drinking Water and Toxic Enforcement Act of 1986" (Prop. 65).

Prepared By

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12/15/93

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