

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 POLYMERIZATION..... 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 rosin.)

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, satinwood, and teak, are known to cause skin, eye and upper respiratory tract irritation along with allergenic 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

THE WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM REQUIRES THAT THE INFORMATION CONTAINED ON THESE SHEETS BE MADE AVAILABLE TO YOUR WORKERS. INSTRUCT YOUR WORKERS TO HANDLE THIS PRODUCT PROPERLY.

FOR INDUSTRIAL USE ONLY

SECTION I : PRODUCT IDENTIFICATION

PRODUCT NAME: GW Flex Set Adhesive Film

PRODUCT CLASS: Dry glue made of paper and thermoset synthetic resins

MANUFACTURER CASCO IMPREGNATED PAPERS AMERICA COMPANY
TELEPHONE: (803) 754-4810
1051 Jenkins Brothers Road
Blythewood, SC.,
USA, 29216

SECTION II : COMPOSITION / INFORMATION ON INGREDIENTS

Fumes and vapor may be generated during hot-press lamination. Refer to MSDS Section VIII for Exposure Limits and Personal Protective Equipment.

If this product is heated or used at temperatures sufficient to produce smoke or fumes, hazardous decomposition products may be generated. Refer to MSDS Section VIII, Recommended Exposure Limits and Personal Protective Equipment.

SECTION III : PHYSICAL DATA

Appearance:	Cream , white papers		
Odour:	Weak		
Boiling Point:	N/A	Vapor Density:	N/A
Melting Point:	N/A	Evaporation Rate:	N/A
Volatile (%):	2 - 4 %	Solubility in Water:	Ca. 11%
pH (aqueous extract):	Ca. 6	Specific Gravity:	N/A

SECTION IV : FIRE AND EXPLOSION HAZARD

Vapor and Toxic gases (Nitrous gases, Hydrogen cyanide, Carbon monoxide, Carbon Dioxide, Ammonia, Formaldehyde, Methanol) may evolve when product is heated or burned.

Extinguishing Media: All extinguishing media are suitable.

SECTION V: STABILITY AND REACTIVITY

STABILITY:	Stable
HAZARDOUS POLYMERIZATION	No
INCOMPATIBILITY:	Acids
CONDITIONS TO AVOID:	Storage of material in heated areas
HAZARDOUS DECOMPOSITION PRODUCTS :	At high temperature, Formaldehyde and monomer vapors and rosin pyrolysis fumes may be released

SECTION VI: HEALTH HAZARD INFORMATION

POTENTIAL HEALTH EFFECTS

Prolonged exposure to smoke or fumes generated by heating this product may cause respiratory irritation with throat discomfort, coughing, or breathing difficulty.

Refer to MSDS Section 8, Exposure limits / Personal Protection, for further information.

Refer to MSDS Section 5, Stability and Reactivity, for hazardous decomposition products.

FIRST AID

EYE CONTACT:	Flush the eyes with large amount of water. If irritation persists, repeat flushing. Get medical attention immediately.
INHALATION:	Provide fresh air. Get medical attention, if irritation persists.
SKIN CONTACT:	Wash gently with mild soap and water. Get medical attention if irritation persists.
INGESTION:	Contact a physician immediately.

SECTION VII: SPILL, LEAK AND DISPOSAL PROCEDURES

Dispose of according to applicable municipal, provincial and federal regulations.

SECTION VIII: EXPOSURE LIMITS / PERSONAL PROTECTION

The fumes or smokes generated from burning or hot-pressing laminating may contain the following ingredients:

	CAS Number	Exposure limits
FORMALDEHYDE	50-00-0	0.75 ppm (OSHA-TWA) 2.0 ppm (OSHA-STEL) 0.3 ppm (ACGIH-CEILING)
METHANOL	67-56-1	200 ppm skin (OSHA-TWA)

		250 ppm skin (OSHA-STEL)
		250 ppm skin (ACGIH-STEL)
TRIETHYLAMINE	12i-44-8	10 ppm (OSHA-TWA)
		15 ppm (OSHA-STEL)
		3 ppm skin (ACGIH-STEL)

RESIN PYROLYSIS FUMES: Maintain exposure to the lowest achievable concentration using recommended personal protective equipment.

RESPIRATION PROTECTION: Appropriate respiratory protection is required when exposure to airborne contaminants may exceed acceptable limits. Respirators should be selected and used according to OSHA, Subpart I (29 CFR 1910.134) and manufacturers recommendations

SKIN PROTECTION: Gloves are required when handling the material.

SECTION IX: SPECIAL PRECAUTIONS AND COMMENTS

STORAGE: Store the material in cool, well ventilated areas.
We strongly recommend the material should be stored in air-conditioned areas at about 20° C and 50% relative humidity, out of direct sunlight, away from any source of heat and incompatible materials.

Protect containers from physical damage.

SECTION X: TOXICOLOGICAL INFORMATION

Product Toxicology This product is considered as being Non-toxic, based on the information available of materials used in this product.

POTENTIAL CANCER HAZARD

Rats chronically exposed to 14 ppm formaldehyde contracted nasal cancers. Based on animal data and limited epidemiological evidence, NTP and IARC have listed formaldehyde as a probable human carcinogen. OSHA regulates formaldehyde as a potential human carcinogen.

Formaldehyde may cause allergic skin reaction. Some reports suggest that formaldehyde may cause respiratory sensitization, such as asthma, and that pre-existing respiratory skin disorders may be aggravated by exposure.

OSHA has identified 0.5 ppm as the "Action level", 29CFR 1910.1048. (Please refer to the OSHA standard for guidance applicable to your specific operations):

SECTION XI: ADDITIONAL INFORMATION

The above information is intended to describe our product in respect to safety and handling requirements only. We have made every effort to provide accurate information from data available to us. However, we do not give any warranties, expressed or implied, regarding to accuracy of this information or the properties, fitness or safety of the product identified herein. We also will not be liable for any damages, losses, injuries or consequential damages which may result from the use of reliance on any information contained herein, since conditions of use and utilization of the product are beyond our control. Observance of all legal requirements is the responsibility of the user.