

Vioca Adhesives Pressure Sensitive Adhesives Specialty Polymers

Columbus Ohio, July 24, 2009

Company: CM Madereras S.A. Attention Mr. Christian Méndez

Ref. Limited Guarantee for Adhesive Multibond X-016 + Catalyst A

We hereby certify that Multibond X016 with Catalyst A, used by CM Maderera S.A., was developed and manufactured to remain in conformance with the following industry standards, and is backed by third party independent certification according to the following standards:

ProductMultibond X016 + Catalyst A
Multibond X016 + Catalyst A

Industry Standard ASTM 5572 Wet Use DIN EN 204 D4

Franklin International is an ISO 9001:2000 certified company. As such, we maintain rigorous quality protocols regarding all aspects of our business. Performance is regularly measured and tracked on a balanced scorecard, with a significant emphasis toward continual improvement. In addition, suppliers and raw materials are managed according to strict quality processes, and we utilize formal, documented procedures in the manufacturing, testing, packaging, and delivery of all products.

Multibond X016 with Catalyst A, is based on colloidally stabilized copolymers of vinyl acetate and various acrylic monomers. Copolymers of this nature have been utilized for decades with great success in a broad range of wood bonding applications. They provide outstanding adhesion to wood and excellent water resistance, and they are not prone to physical or chemical degradation with time. Empirical evidence suggests that films of the polymers remain unchanged for a period of time well in excess of 50 years from the date of manufacture.

As a cross-linking Pva, the viscosity of Multibond X016 could increase with prolonged storage. For best results, recommended use is within 6 months of the manufacture date.

In the case of boards manufactured by CM Maderera S.A. with Multibond X016+ Catalyst A, Franklin International guarantees that the cured adhesive film will maintain its adhesion properties for a period of time equal to that offered by the supplier of the paint/surface protection used on the panel, up to a maximum of 10 years.

The guarantee is not applicable if:

- 1. There is exterior exposure to weather without adequate protection by a surface coating
- 2. If the surface coating has cracks or does not sufficiently protect the board
- 3. If there are cuts or joints that are not properly sealed



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4. If the panel manufacturer has failed to follow the adhesive manufacturer's recommend usage instructions and guidelines as detailed in the User Guide

If, in the event of a delamination, it has been determined by an external laboratory mutually agreed upon by both parties, and corroborated by results of testing conducted by Franklin International USA laboratory, that the delamination is attributable to the product, and proven that the technical instructions/specifications related to usage outlined in the adhesive manufacturer's User Guide and technical data have been followed, Franklin International will assume the cost of the external laboratory evaluation, and the cost of the adhesive necessary to repair the problem, excluding other costs such as the cost of the substrate, labor cost, adhesive application or other related costs.

If the result of the evaluation of the cause of the delamination is determined to be unrelated and not attributable to the adhesive, the cost of the external laboratory evaluation will be assumed by CM Maderas.

Franklin International extends this guarantee exclusively to CM Maderera S.A., and does not concede the right that any part of this document be understood as granting further guarantees or compensation than those specified in this document to CM Maderera S.A..

Best regards,

Danielle Milam

Vice President Latin America

Franklin International

This guarantee is limited to the statements above. Since the use of this product is beyond the control of the manufacturer, no guarantee or warranty, expressed or implied, is made as to such use or effects incidental to such use, handling or possession or the results to be obtained, whether in accordance with the directions or claimed so to be. Franklin International expressly disclaims responsibility for adverse results or effects where customer's use or misuse of its product may have been a factor. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing laws and/or patents covering any material or use.

Franklin International

Thank you for your inquiry regarding our Multibond X-016 and Catalyst A products.

Regarding LEED, I am pleased to inform you that these products do not contain any urea formaldehyde, and do comply with the Low VOC limits specified in the LEED requirements.

I hope you find this information helpful.

Thank you for doing business with Franklin International.

Very truly yours,

Mary A. Sanger Product Stewardship Manager Franklin International

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SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION MULTIBOND X-016

CAS Number: 26337-27-9

HMIS Hazard Rating:

Health: 1 Fire: 1 Reactivity: 0

Company Identification:

Franklin International 2020 Bruck Street Columbus OH 43207

Contact:

Telephone/Fax:

Emergency Phone (24 Hour):

Franklin Technical Services (800) 877-4583 (614) 445-1493 Franklin Security (614) 445-1300 (800) 424-9300 (703) 527-3887

Chemtrec (24 Hour): Chemtrec International:

Product Class Product Use: Product Code:

POLYVINYL ACETATE EMULSION

ADHESIVE 2720

Division:

Polymer Products

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS
Hazardous Ingredients
CAS Number Days CAS Number Percent

GLYCOL ETHER DB

112-34-5

3.14

vinyl acetate

108-05-4

0.50

OSHA PELs & ACGIH TLVs are listed in Section 8 where applicable.

SECTION 3 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

White colored water-based adhesive Slippery in the wet state. ROUTES OF ENTRY:

Inhalation:

yes Ingestion: ves

Skin: no Eve: yes

INHALATION:
Vapors and/or aerosols which may be formed at elevated temperature may be irritating to eyes and respiratory tract.

No hazard expected in normal industrial use. Ingestion is not a likely route of exposure. SKIN:

Prolonged or repeated skin contact can cause irritation. EYE:

Substance may cause moderate eye irritation
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:
Pre-existing skin disorders
CARCINOGENICITY:

IARC: YOUNTP: NO OSHA: 1 Yes, 2B (vinyl acetate) See Section 2

The International Agency for Research on Cancer has determined vinyl acetate to be carcinogenic in experimental animals.

Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans

REPRODUCTIVE TOXICITY:

None anticipated based on product formula. TARGET ORGANS:

Eyes and skin.

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SECTION 4 - FIRST AID MEASURES

INHALATION:

Remove to fresh air. If difficulty persists, seek medical attention. INGESTION:

Call poison control center immediately. Follow their specific instructions. Do not induce vomiting.

Wash with soap and water. Contact a physician if irritation develops or persists.

EYE:

Hold eyelids apart and flush with plenty of water for at least 15 minutes. Seek medical attention.

SECTION 5 - FIRE-FIGHTING MEASURES Flammability Class (OSHA) IIIB

Flash Point:

IIIB > 200 F

Explosive Range:

Setaflash Not Available

EXTINGUISHING MEDIA:

Use alcohol foam, carbon dioxide, water spray, or ABC dry chemical when fighting fires involving this product.

HAZARDOUS COMBUSTION PRODUCTS:

Various oxides of carbon, organic compounds, and water may be released during combustion.

FIRE FIGHTING PROCEDURES:
Wear a NIOSH approved self contained breathing apparatus. Wear appropriate personal protective equipment.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES:

Use inert absorbent to dike the spill. Keep away from drains.

If possible pump liquid into an approved container or spread absorbent over spill and shovel product/absorbent mixture into an approved container. If product has dried scrape up and place in an approved

SECTION 7 - HANDLING AND STORAGE

HANDLING:

Empty drums should be completely drained, properly bunged and promptly returned to a reconditoner, or properly disposed of.

Use only in well ventilated area.

STORAGE:

Store at temperatures between 50 F and 90 F.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION
Occupational Exposure Limits
ACGIH TLV ACGIH TLV-C ACGIH STEL OSHA STEL

ACGIH TLV-C ACGIH STEL OSHA SIEL

GLYCOL ETHER DB

N/est

OSHA PEL

vinyl acetate

N/est

N/est

N/est

N/est

10.00 PPM N/est

15.00 PPM

N/est

N/est

ENGINEERING CONTROLS:

Use local exhaust as needed to maintain occupational exposure limits.

Facilities storing or utilizing any chemical should be equipped with an eyewash facility and a safety shower RESPIRATORY PROTECTION:

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Respiratory protection is not expected to be necessary under normal use. Follow requirements for respiratory protection in OSHA 1910.134 use Follow reg

Chemical splash goggles (ANSI Z87.1 or approved equivalent). SKIN PROTECTION:

Where skin contact can occur, wear impervious gloves

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form: LIQUID Appearance/Color: Odor: MILD

Solubility (in water): DISPERSIBLE IN WATER

pH Value: Boiling Range/Point: Evaporation Rate: 4.5 210.°F - 212.°F Slower than n-Butyl Acetate

% Volatile: Specific Gravity: 50.8

SECTION 10 - STABILITY AND REACTIVITY

This product is stable Hazardous polymerization will not occur Hazardous Polymerization:

CONDITIONS TO AVOID: None known

INCOMPATIBLITY:

Strong acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of carbon may be released during combustion.

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute and chronic health effects are not expected as long as good industrial hygeine and safety precautions are followed.

SECTION 12 - ECOLOGICAL INFORMATION

This product has not been tested for environmental effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL:

Disposal of this product must comply with all applicable federal, state and local regulations.

CONTAINER DISPOSAL:

Disposal of this container should comply with all applicable federal, state and local regulations.

SECTION 14 - TRANSPORT INFORMATION

UN Number NONE UN Pack Group N/A NON HAZ

UN Class ICAO/IATA Class IMDG Class NON HAZARDOUS (SEE NOTE) NON HAZARDOUS

Shipping Name ADR/RID Class NON HAZARDOUS NON HAZARDOUS

Packaging may not be approved for shipping by air. Please contact Franklin International for further information.

SECTION 15 - REGULATORY INFORMATION
SARA TITLE III SECTION 313:
This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right to Know Act of 1986 and of 40 CFR 372:

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Chemical Name CAS Number Percent GLYCOL EIHER DB 112-34-5 3.14 vinyl acetate 108-05-4 0.50

TSCA (Toxic Substances Control Act Inventory):
All components of this product are listed on the TSCA inventory except as exempted.

SECTION 16 - OTHER INFORMATION

DISCLAIMER:

While the information and recommendations set forth herein are believed to be accurate as of the data hereof, Franklin International makes no warranty, express or implied, with respect thereto and disclaims all liability from reliance thereon