

Franklin International

MATERIAL SAFETY DATA SHEET

MSDS Name: Titebond Interior/Exterior Construction Adhesive

MSDS Number: 3451

Revision Date: 11/15/05

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Titebond Interior/Exterior Construction Adhesive

CAS Number: none

HMIS Hazard Rating: Health: 2 Fire: 3 Reactivity: 0

Company Identification: Franklin International
2020 Bruck Street
Columbus OH 43207

Contact: Franklin Technical Services
Telephone/Fax: (800) 877-4583 (614) 445-1493
Emergency Phone (24 Hour): Franklin Security
(614) 445-1300
Chemtrec (24 Hour): (800) 424-9300
Chemtrec International: (703) 527-3887

Product Class: solvent based
Product Use: construction adhesive
Product Code: 53103

Division: Construction Adhesives & Sealants

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

| Hazardous Ingredients | CAS Number | Percent |
|-----------------------|------------|---------|
| hexane | 110-54-3 | 20.03 |

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

SECTION 3 - HAZARD IDENTIFICATION

NOTE:

Repeated and prolonged overexposure to the mixture of solvent(s) listed in Section 2 can result in systemic effects including permanent brain, nervous system, liver, and kidney damage. Intentional misuse by deliberately concentrating & inhaling the contents may be harmful or fatal.

EMERGENCY OVERVIEW:

Product is beige, medium viscosity mastic with a strong solvent odor. DANGER: EXTREMELY FLAMMABLE, VAPOR HARMFUL. CONTAINS HEXANE. Vapors can cause flash fire. Vapors may ignite explosively. Prevent buildup of vapors by opening all windows & doors to create cross-ventilation. Keep away from heat, sparks & open flame. Do not smoke. Extinguish all flames & pilot lights. Turn off stoves, heaters & sparking electric motors. Keep away from all sources of ignition until all vapors are gone. Keep container tightly closed when not in use. Avoid prolonged breathing of vapor. KEEP OUT OF THE REACH OF CHILDREN.

ROUTES OF ENTRY:

Ingestion: Yes
Inhalation: Yes
Skin: Yes
Eye: Yes

INHALATION:

Avoid breathing vapor or mists.
May cause headaches and dizziness.
High vapor concentrations are irritating to the nose, throat and lungs and can cause systemic effects.
Vapors can readily accumulate in confined or poorly ventilated areas.

INGESTION:

Ingestion is not a probable route of exposure. Harmful if swallowed.

SKIN:

Prolonged or repeated skin contact can cause irritation.

EYE:

Substance may cause severe eye irritation.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Preexisting neurological conditions, skin disorders, and respiratory disease.

CARCINOGENICITY:

IARC: No

NTP: No

OSHA: No

TARGET ORGANS:

Prolonged or repeated overexposure may cause eye, skin, respiratory system, central nervous system, and peripheral nervous system damage.

SECTION 4 - FIRST AID MEASURES

Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias (irregular beating) in persons exposed to high concentrations of hexane (e.g. in enclosed spaces or with deliberate abuse). If used, monitor heart action closely. Consider use of other drugs with less arrhythmogenic potential.

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.

SKIN:

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) IB

Flash Point: < 0 F

Setaflash

Explosive Range: Lower explosive limit 1.2%

Upper explosive limit 7.5%

Vapors can travel back to the source of ignition.

Flammable liquid. Can form explosive mixtures at temperatures at or above the flashpoint

EXTINGUISHING MEDIA:

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

HAZARDOUS COMBUSTION PRODUCTS:

Carbon monoxide may be released during combustion.

FIRE FIGHTING PROCEDURES:

Can burn in a fire, releasing toxic vapors.

Wear a NIOSH approved self-contained breathing apparatus.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

CONTAINMENT TECHNIQUES:

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

CLEAN-UP:

If possible pump liquid into an approved container or spread absorbent over spill and shovel (use non-sparking equipment) product/ absorbent mixture into an approved container. If product has dried, scrape up and place in an approved container.

EMERGENCY MEASURES:

Isolate hazard area. Keep unnecessary and unprotected personnel from entering area. Wear all appropriate personal protection equipment (PPE) (see Section 8).

SECTION 7 - HANDLING AND STORAGE

HANDLING:

Open container in well ventilated area.

Use only in well ventilated area.

Follow all MSDS/label precautions even after container is emptied.

Containers may retain product residues and vapors.

Avoid prolonged or repeated contact with the skin.

STORAGE:

Keep away from sources of ignition.

Do not store above 110F. Store large quantities in buildings designed & protected for storage of NFPA Class 1-B flammable materials.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Occupational Exposure Limits

| | ACGIH TLV | ACGIH TLV-C | ACGIH STEL | OSHA STEL | OSHA PEL |
|--------|-----------|-------------|------------|-----------|------------|
| hexane | 50.00 PPM | N/est | N/est | N/est | 500.00 PPM |

ENGINEERING CONTROLS:

Use local exhaust as needed to maintain occupational exposure limits.

Maintain standard plant ventilation.

OTHER:

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

RESPIRATORY PROTECTION:

Where exposure limits may be exceeded select a NIOSH approved respirator with appropriate Protection Factor and cartridge for the specific contaminants. Follow requirements for respiratory protection in OSHA 1910.134.

EYE PROTECTION:

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: medium viscosity mastic

Appearance/Color: beige

Odor: mild solvent odor

Solubility (in water): nil

pH Value: Not Applicable
Boiling Range/Point: 143.0°F
Evaporation Rate: Faster than n-Butyl Acetate

% Volatile: 20.39%
Specific Gravity: 1.26
VOC: 247 g/l

SECTION 10 - STABILITY AND REACTIVITY

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

CONDITIONS TO AVOID:

Heat, sparks, open flame

INCOMPATIBILITY:

Strong oxidizing agents, acids and bases.

HAZARDOUS DECOMPOSITION PRODUCTS:

Not applicable

SECTION 11 - TOXICOLOGICAL INFORMATION

Hexane - Acute:

Ingestion of hexane can cause nausea, vomiting, stomach pain, and diarrhea. Hexane can irritate the skin and the eyes. Acutely, the most common toxic effects are central nervous system depression and chemical pneumonitis resulting from aspiration into the lungs following ingestion.

Hexane - Chronic:

Dermal irritation and central nervous system depression accompanied by peripheral nervous system damage (polyneuropathy) are common traits of sustained overexposure.

SECTION 12 - ECOLOGICAL INFORMATION

This formulation 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

For any 10.5-ounce size of this product and for all 29-ounce to 1 gallon sizes of this product not shipped by air:

DOT:

UN Number: None
UN Pack Group: Not applicable
UN Class: ORM-D
Shipping Name: Consumer Commodity

AIR:

UN Number: ID8000
UN Pack Group: Not applicable
UN Class: 9
ICAO/IATA Class: 9

Shipping Name: Consumer Commodity
MARITIME:
UN Number: UN1133
UN Pack Group: III
UN Class: 3
IMDG Class: Limited Quantity
Shipping Name: Adhesives, containing a Flammable Liquid, Limited Quantity

For air shipments of 29-ounce to 1 gallon sizes of this product or any shipment of this product in a 1 gal to 5 gal container:

UN Number: UN1133
UN Pack Group: III
UN Class: 3
ICAO/IATA Class: 3
IMDG Class: 3
Shipping Name: Adhesives containing a Flammable Liquid

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:

| Chemical Name | CAS Number | Percent |
|---------------|------------|---------|
| hexane | 110-54-3 | 20.03 |

TSCA (Toxic Substances Control Act Inventory):

All components of this product are listed on the TSCA inventory except as exempted.

PENNSYLVANIA:

Hazardous components required to be listed at 1% or more:

kaolin clay; kaolin; 1332-58-7

hexane; hexane; 110-54-3

Non-hazardous components required to be listed at 3% or more:

styrene-butadiene rubber 9003-55-8; polymerized rosin 65997-05-9;

petroleum hydrocarbon resin 68527-25-3

NEW JERSEY:

clay 1332-58-7; petroleum hydrocarbon resin 68527-25-3; styrene-

butadiene rubber 9003-55-8; polymerized rosin 65997-05-9;

hexane 110-54-3

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.