

# Franklin International

## MATERIAL SAFETY DATA SHEET

MSDS Name: Titebond VOC-Compliant Heavy Duty Construction Adhesive  
 MSDS Number: 5271  
 Revision Date: 6/8/05

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Titebond VOC-Compliant Heavy Duty 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: 53102

Division: Construction Adhesives & Sealants

### SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Number	Percent
methyl acetate	79-20-9	17.62
acetone	67-64-1	3.70
hexane	110-54-3	2.53

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:

**DANGER:** EXTREMELY FLAMMABLE, VAPOR HARMFUL. CONTAINS ACETONE, METHYL ACETATE, HEXANE. Vapors can cause flash fire. Vapors can ignite explosively. Prevent buildup of vapors by opening all windows and doors to create cross-ventilation. Keep away from heat, sparks and open flame. Do not smoke. Turn off stoves, heaters and sparking electric motors. Keep container tightly closed when not in use.

Avoid prolonged breathing of vapor. KEEP OUT OF THE REACH OF CHILDREN. Product is a beige, medium viscosity mastic.

**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 contact can cause moderate irritation, defatting, and dermatitis.

**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

**REPRODUCTIVE TOXICITY:**

This product has not been evaluated for reproductive toxicity.

**TARGET ORGANS:**

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

**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.

**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.%

Upper explosive limit 16.%

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

**EXTINGUISHING MEDIA:**

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

## HAZARDOUS COMBUSTION PRODUCTS:

Oxides of carbon may be released during combustion.

## FIRE FIGHTING PROCEDURES:

Wear a NIOSH approved self contained breathing apparatus. Wear appropriate personal protective equipment.

Use water spray or fog to cool fire exposed containers. Closed containers may explode when exposed to extreme heat.

## 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:

Avoid breathing vapors from the headspace of containers.

Keep containers closed when not in use.

Use only in well ventilated area.

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

Containers may retain product residues and vapors.

## STORAGE:

Keep away from sources of ignition.

Store large quantities in buildings designed 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
methyl acetate	200.00 PPM	N/est	250.00 PPM	N/est	200.00 PPM
acetone	500.00 PPM	N/est	1000.00 PPM	N/est	1000.00 PPM
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: Mastic  
Appearance/Color: Beige  
Odor: Solvent  
Solubility (in water): Nil  
pH Value: Not Applicable  
Boiling Range/Point: 133.0°F - 154.0°F  
Evaporation Rate: Faster than n-Butyl Acetate

% Volatile: 24.%  
Specific Gravity: 1.25  
VOC: 47 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:

Oxides of carbon may be released during combustion.

SECTION 11 - TOXICOLOGICAL INFORMATION

Adverse health effects are not expected from normal use of this product. The following is toxicological information for individual components.

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.

Methyl Acetate:

Breathing small amounts of methyl acetate during normal handling may cause irritation to the mucous membranes of the nose, throat and lungs. Excessive inhalation can cause central nervous system depression which could include dizziness, drowsiness, weakness, fatigue, nausea, headache and unconsciousness. Methyl acetate is a moderate eye irritant and can cause stinging, redness and swelling of the eyes. It is also a skin irritant and prolonged contact will result in defatting and redness of the skin which could lead to dermatitis. Ingestion of methyl acetate can cause nausea, vomiting, and diarrhea.

Acetone - Acute:

Acetone has a low order of acute and inhalation toxicity. Acetone is a slight skin irritant and moderately severe eye irritant. Excessive inhalation can cause headache, drunkenness, and weakness.

Acetone - Chronic:

Kidney damage and anemia can result from sustained high level

exposure. Acetone is reported to potentiate the liver toxicity of chloroform.

#### 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: 3  
 UN Class: 3  
 IMDG Class: ADHESIVE, 3, UN1133, PG III, LTD.QTY.  
 Shipping Name: ADHESIVE  
 EMS Code: F-E, S-D

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	2.53

toluene	108-88-3	trace
---------	----------	-------

- PROP 65 (TERATOGEN)

WARNING: This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.

Chemical Name	CAS Number	Percent
toluene	108-88-3	trace

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:

acetone; 2-propanone; 67-64-1

methyl acetate; 79-20-9

kaolin clay; kaolin; 1332-58-7

hexane; 110-54-3

limestone; 1317-65-3

Non-hazardous ingredients required to be listed at 3%:

petroleum hydrocarbon resin 68131-87-3

NEW JERSEY:

methyl acetate 79-20-9, hexane 110-54-3, acetone 67-64-1, petroleum

hydrocarbon resin 68131-87-3, clay 1332-58-7

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.