

Franklin International

MATERIAL SAFETY DATA SHEET

MSDS Name: Titebond 531 Moisture Control System

MSDS Number: 1286

Revision Date: 5/5/05

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Titebond 531 Moisture Control System

CAS Number: none

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: 2-part epoxy

Product Use: moisture barrier

Product Code: 1286

HMIS Hazard Rating: Titebond 531 Moisture Control System,
Part A, Epoxy Resin

Health: 2 Fire: 2 Reactivity: 0

Titebond 531 Moisture Control System,
Part B, Epoxy Hardener

Health: 3 Fire: 2 Reactivity: 0

Division: Construction Adhesives & Sealants

SECTION 2 - COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients	CAS Number	Percent
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For 2-part epoxy components:	100.00
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Titebond 531 Moisture Control System, Part A, Epoxy Resin:

Hazardous Ingredients	CAS Number	Percent
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epoxy resins	25068-38-6	75.10
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xylene	1330-20-7	14.89
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castor oil epoxy resin	74398-71-3	10.01
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Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

Hazardous Ingredients	CAS Number	Percent
aliphatic amine	mixture	51.53
dinonyl phenol	84962-08-3	40.02
xylene	1330-20-7	8.45

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

SECTION 3 - HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

CAUTION: COMBUSTIBLE LIQUID. VAPOR HARMFUL. Contains xylene. Keep away from heat, sparks, and flame. Use only with positive cross ventilation. Avoid breathing vapors. Do not swallow or allow eye contact. May cause allergic skin reactions. Product is a clear color with a solvent odor.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

CAUTION: COMBUSTIBLE LIQUID. EYE, SKIN AND RESPIRATORY IRRITANT. Prolonged or repeated exposure may cause asthma and skin sensitization or other allergic response. Amber colored liquid with slight ammonia odor.

ROUTES OF ENTRY:

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

INHALATION:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

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.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

Vapors may be highly irritating to the nose, throat and upper respiratory tract. Repeated or prolonged exposure can result in lung damage.

INGESTION:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

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

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

May cause gastrointestinal irritation and damage to mucous membranes if swallowed.

SKIN:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:
Prolonged or repeated skin contact can cause irritation. Allergic reactions are possible.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:
May cause moderate skin irritation and discomfort. Product may be absorbed through the skin. May cause skin sensitization, an allergic reaction, which becomes evident on re-exposure to the material.

EYE:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:
Substance may cause moderate eye irritation.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:
May cause moderate eye irritation. May result in corneal injury.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:
Preexisting neurological conditions, skin disorders, and respiratory disease.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:
Asthma, chronic respiratory disease, eye disease, skin disorders and allergies.

CARCINOGENICITY:

IARC: No

NTP: No

OSHA: No

REPRODUCTIVE TOXICITY:

Xylene has been shown to cause birth defects in laboratory animals.

TARGET ORGANS:

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

SECTION 4 - FIRST AID MEASURES

INHALATION:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:
Remove to fresh air. If difficulty persists, seek medical attention.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:
Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen by trained personnel.

INGESTION:

If swallowed seek medical attention. Do not induce vomiting unless directed to do so by medical personnel. Call poison control center immediately, follow their specific instructions.

SKIN:

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

Explosive Range: Not Available

Flammability Class (OSHA):

Titebond 531 Moisture Control System:

Part A, Epoxy Resin: II

Part B, Epoxy Hardener: II

Flashpoint:

Titebond 531 Moisture Control System

Part A, Epoxy Resin: 105.0 F - 110.0 F

Part B, Epoxy Hardener: 130.0 F

EXTINGUISHING MEDIA:

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

HAZARDOUS COMBUSTION PRODUCTS:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

The by-products expected in incomplete pyrolysis or combustion of epoxy resins are mainly phenolics, carbon monoxide and water. The thermal decomposition products of epoxy resins therefore should be treated as potentially hazardous substances, and appropriate precautions should be taken.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

Ammonia, carbon monoxide, nitrogen oxide

FIRE FIGHTING PROCEDURES:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

Use water to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition is passed. Wear positive pressure self-contained breathing apparatus and full protective equipment.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

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.

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 and shut off all sources of ignition. Keep unnecessary and unprotected personnel from entering area. Wear all appropriate personal protective equipment (PPE)(see Section 8).

SECTION 7 - HANDLING AND STORAGE**HANDLING:**

Open container and use in well ventilated area.

Avoid breathing vapors.

Ground and bond containers when transferring material.

Wash thoroughly after handling.

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

Containers may retain product residues.

STORAGE:

Store in a cool, dry, well-ventilated area away from incompatible materials. Keep container tightly closed. Keep away from all ignition sources.

Store at temperatures between 50 F and 90 F.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**Titebond 531 Moisture Control System, Part A, Epoxy Resin:**

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
epoxy resins	N/est.	N/est.	N/est.	N/est.	N/est/
xylene	100.0 PPM	N/est.	150.00 PPM	N/est.	100.0 PPM
castor oil epoxy resin	N/est.	N/est.	N/est.	N/est.	N/est.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

	ACGIH TLV	ACGIH TLV-C	ACGIH STEL	OSHA STEL	OSHA PEL
aliphatic amine	N/est.	N/est.	N/est.	N/est.	N/est.
dinonyl phenol	N/est.	N/est.	N/est.	N/est.	N/est.
xylene	100.00 PPM	N/est.	150.00 PPM	N/est.	100.00 PPM
phenol	N/est.	N/est.	N/est.	N/est.	5.0 PPM
butyl alcohol	N/est.	N/est.	N/est.	N/est.	N/est.

ENGINEERING CONTROLS:

Use adequate and effective positive cross ventilation as needed to maintain occupational exposure limits. Close off air return to prevent vapors from migrating.

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:

Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).

SKIN PROTECTION:

Where repeated or prolonged contact can occur, wear chemical resistant gloves.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

Form:	liquid
Appearance/Color:	clear
Odor:	solvent
Solubility (in water):	nil
pH Value:	not applicable
Boiling Range:	not available
Evaporation Rate:	slower than n-butyl acetate
% Volatile:	14.89%
Specific Gravity:	1.10
VOC:	164 g/l

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

Form:	liquid
Appearance/Color:	amber
Odor:	ammonia
Solubility (in water):	nil
pH Value:	not applicable
Boiling Range:	not applicable
Evaporation Rate:	slower than n-butyl acetate
% Volatile:	8.45%
Specific Gravity:	0.94
VOC:	257 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:

Acids, bases, amines and oxidizing materials.

SECTION 11 - TOXICOLOGICAL INFORMATION

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

Prolonged inhalation of vapors at levels exceeding permissible exposure standards may cause central nervous system depression resulting in dizziness, drowsiness, weakness, nausea, headache, and unconsciousness.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

This product has not been tested for acute toxicity. Based on toxicity information of the components, this product should be considered a moderate to high irritant to the skin, eyes, and respiratory system. Prolonged inhalation of vapors at levels exceeding permissible exposure standards may cause central nervous system depression resulting in dizziness, drowsiness, weakness, nausea, headache, and unconsciousness.

SECTION 12 - ECOLOGICAL INFORMATION

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

Constituents of this product have been shown to have moderate acute toxicity to aquatic organisms. Do not dump into any sewers, on the ground, or into any body of water.

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

Do not dump into any sewers, on the ground or into any body of water.

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 packages not shipped by air: (Ground)

UN Number:	None
UN Pack Group:	Not applicable
UN Class:	ORM-D

Shipping Name: Consumer Commodity

For air shipments:

UN Number: UN1866
 UN Pack Group: III
 UN Class: 3
 ICAO/IATA Class: 3
 Shipping Name: Resin Solution, Flammable, Limited Quantity

For maritime shipments:

UN Number: UN1866
 UN Pack Group: III
 UN Class: 3
 ICAO/IATA CLASS: 3
 Shipping Name: Resin Solution, Flammable, Limited Quantity

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:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

Chemical Name:	CAS Number:	Percent:
epoxy resins	25068-38-6	75.10
xylene	1330-20-7	14.89
castor oil epoxy resin	74398-71-3	10.01

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

xylene	1330-20-7	8.05
phenol	108-95-2	3.49

TSCA (Toxic Substances Control Act Inventory):

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

PENNSYLVANIA:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

Hazardous components required to be listed at 1%:

- xylene 1330-20-7
- ethyl benzene 100-41-4

Nonhazardous components required to be listed at 3%:

- epoxy resins 25068-38-6, epichlorohydrin
- castor oil epoxy resin 74398-71-3

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

Hazarous components required to be listed at 1%:

xylene 1330-20-7

phenol 108-95-2

Nonhazardous components required to be listed at 3%:

dinonyl phenol 84962-08-3, benzyl alcohol 100-51-6, hydrogenated
polymer with bezene amine 135108-88-2

NEW JERSEY:

Titebond 531 Moisture Control System, Part A, Epoxy Resin:

epoxy resins 25068-38-6, xylene 1330-20-7, ethyl benzene 100-41-4,
epichlorohydrin castor oil epoxy resin 74398-71-3, ethyl benzene
100-41-4

Titebond 531 Moisture Control System, Part B, Epoxy Hardener:

dinonyl phenol 84962-08-3, benzyl alcohol 100-51-6, xylene
1330-20-7, hydrogenated polymer with benzene amine 135108-88-2,
benzene 1-3, dimethane amine 1477-55-0

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.