

## TRI-BUILT® 200 PU SEALANT

### SECTION 1: PRODUCT & COMPANY IDENTIFICATION

PRODUCT NAME:	TRI-BUILT® 200 PU Sealant	DISTRIBUTED BY:	Beacon Sales Acquisition, Inc.
ARTICLE NUMBER:	SDS197	ADDRESS:	505 Huntmar Park Drive, Suite 300 Herndon, VA 20170
PRODUCT TYPE:	Sealant	PHONE:	571-323-3939
PRODUCT USE:	For industrial use	INTERNET:	www.becn.com
MANUFACTURER:	THE DOW CHEMICAL COMPANY		
ADDRESS:	2211 H.H. DOW WAY MIDLAND MI 48674		
PHONE:	800-258-2436		
EMERGENCY PHONE:	24-HOUR EMERGENCY CONTACT: CHEMTREC +1 800-424-9300 LOCAL EMERGENCY CONTACT: 800-424-9300		
EFFECTIVE DATE:	11/28/2023		

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## 2. HAZARDS IDENTIFICATION

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### Hazard classification

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Respiratory sensitisation - Category 1

Skin sensitisation - Category 1

Carcinogenicity - Category 1A

### Label elements

#### Hazard pictograms



Signal word: **DANGER!**

### Hazards

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause cancer.

## TRI-BUILT 200 PU Sealant

### Precautionary statements

#### Prevention

Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.  
 Avoid breathing mist or vapours.  
 Contaminated work clothing must not be allowed out of the workplace.  
 Wear protective gloves, protective clothing, eye protection and/or face protection.  
 In case of inadequate ventilation wear respiratory protection.

#### Response

IF ON SKIN: Wash with plenty of soap and water.  
 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.  
 IF exposed or concerned: Get medical advice/ attention.  
 If skin irritation or rash occurs: Get medical advice/ attention.  
 Wash contaminated clothing before reuse.

#### Storage

Store locked up.

#### Disposal

Dispose of contents and/or container to an approved waste disposal plant.

### Other hazards

No data available

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

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This product is a mixture.

Component	CASRN	Concentration
Limestone	1317-65-3	> 30.0 - < 60.0 %
Bis-(2-propylheptyl) phthalate	53306-54-0	> 15.0 - < 40.0 %

**TRI-BUILT 200 PU Sealant**

Methylenediphenyl diisocyanate prepolymer	1313410-91-1	> 15.0 - < 40.0 %
Titanium dioxide	13463-67-7	> 1.0 - < 5.0 %
Methylenediphenyl diisocyanate	26447-40-5	> 1.0 - < 5.0 %
4,4'-Methylenediphenyl diisocyanate	101-68-8	> 0.1 - < 1.0 %
Quartz	14808-60-7	> 0.1 - < 1.0 %
Tosyl isocyanate	4083-64-1	> 0.1 - < 1.0 %
Amorphous silica	7631-86-9	> 0.1 - < 1.0 %

*Note*

Note: CAS 101-68-8 is an MDI isomer that is part of CAS 26447-40-5.

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## 4. FIRST AID MEASURES

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**Description of first aid measures**

**General advice:**

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

**Skin contact:** Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation or rash occurs. Wash clothing before reuse. An MDI skin decontamination study demonstrated that cleaning very soon after exposure is important, and that a polyglycol-based skin cleanser or corn oil may be more effective than soap and water. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Suitable emergency safety shower facility should be available in work area.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist. Suitable emergency eye wash facility should be available in work area.

**Ingestion:** If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

**Most important symptoms and effects, both acute and delayed:**

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

## TRI-BUILT 200 PU Sealant

### Indication of any immediate medical attention and special treatment needed

**Notes to physician:** Excessive exposure may aggravate preexisting asthma and other respiratory disorders (e.g. emphysema, bronchitis, reactive airways dysfunction syndrome). Maintain adequate ventilation and oxygenation of the patient. May cause respiratory sensitization or asthma-like symptoms. Bronchodilators, expectorants and antitussives may be of help. May cause asthma-like (reactive airways) symptoms. Bronchodilators, expectorants, antitussives and corticosteroids may be of help. Treat bronchospasm with inhaled beta2 agonist and oral or parenteral corticosteroids. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed 24-48 hours for signs of respiratory distress. If you are sensitized to diisocyanates, consult your physician regarding working with other respiratory irritants or sensitizers. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient. Repeated excessive exposure may aggravate preexisting lung disease.

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## 5. FIREFIGHTING MEASURES

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### Extinguishing media

**Suitable extinguishing media:** Water fog or fine spray.. Dry chemical fire extinguishers.. Carbon dioxide fire extinguishers.. Foam.. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective..

**Unsuitable extinguishing media:** Do not use direct water stream.. May spread fire..

### Special hazards arising from the substance or mixture

**Hazardous combustion products:** During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating.. Combustion products may include and are not limited to:. Nitrogen oxides.. Isocyanates.. Hydrogen cyanide.. Carbon monoxide.. Carbon dioxide..

**Unusual Fire and Explosion Hazards:** Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture of closed containers. Elevated temperatures accelerate this reaction.. Container may rupture from gas generation in a fire situation.. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.. Dense smoke is produced when product burns.. Electrically ground and bond all equipment..

### Advice for firefighters

**Fire Fighting Procedures:** Keep people away. Isolate fire and deny unnecessary entry.. Stay upwind. Keep out of low areas where gases (fumes) can accumulate.. Water is not recommended, but may be applied in large quantities as a fine spray when other extinguishing agents are not available.. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles.. Immediately withdraw all personnel from the area in case of rising sound from venting safety device or discoloration of the container.. Do not use direct water stream. May spread fire.. Move container from fire area if this is possible without hazard.. Use water spray to cool fire-exposed containers and fire-affected zone until fire is out.. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage.. Review the "Accidental Release Measures" and the "Ecological Information" sections of this (M)SDS..

## TRI-BUILT 200 PU Sealant

**Special protective equipment for firefighters:** Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves).. Avoid contact with this material during fire fighting operations. If contact is likely, change to full chemical resistant fire fighting clothing with self-contained breathing apparatus. If this is not available, wear full chemical resistant clothing with self-contained breathing apparatus and fight fire from a remote location.. For protective equipment in post-fire or non-fire clean-up situations, see Section 8 of the safety data sheet..

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## 6. ACCIDENTAL RELEASE MEASURES

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**Personal precautions, protective equipment and emergency procedures:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Refer to section 7, Handling, for additional precautionary measures. Keep personnel out of low areas. Keep upwind of spill. Spilled material may cause a slipping hazard. Ventilate area of leak or spill. If available, use foam to smother or suppress. See Section 10 for more specific information. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

**Environmental precautions:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

**Methods and materials for containment and cleaning up:** Contain spilled material if possible. Absorb with materials such as: Dirt. Vermiculite. Sand. Clay. Do NOT use absorbent materials such as: Cement powder (Note: may generate heat). Collect in suitable and properly labeled open containers. Do not place in sealed containers. Suitable containers include: Metal drums. Plastic drums. Polylined fiber pacs. Wash the spill site with large quantities of water. Attempt to neutralize by adding suitable decontaminant solution: Formulation 1: sodium carbonate 5 - 10%; liquid detergent 0.2 - 2%; water to make up to 100%, OR Formulation 2: concentrated ammonia solution 3 - 8%; liquid detergent 0.2 - 2%; water to make up to 100%. If ammonia is used, use good ventilation to prevent vapor exposure. Contact your supplier for clean-up assistance. See Section 13, Disposal Considerations, for additional information.

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## 7. HANDLING AND STORAGE

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**Precautions for safe handling:** Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Use with adequate ventilation. Wash thoroughly after handling. Keep container tightly closed. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

**Conditions for safe storage:** Store in a dry place. Protect from atmospheric moisture. Do not store product contaminated with water to prevent potential hazardous reaction. See Section 10 for more specific information. Additional storage and handling information on this product may be obtained by calling your sales or customer service contact.

### Storage stability

<b>Storage temperature:</b>	<b>Storage Period:</b>
10 - 30 °C (50 - 86 °F)	12 Month

## TRI-BUILT 200 PU Sealant

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value
Limestone	Dow IHG	TWA	1 mg/m <sup>3</sup>
	OSHA Z-1	TWA total dust	15 mg/m <sup>3</sup>
	OSHA Z-1	TWA respirable fraction	5 mg/m <sup>3</sup>
Titanium dioxide	Dow IHG	TWA	2.4 mg/m <sup>3</sup>
	OSHA Z-1	TWA total dust	15 mg/m <sup>3</sup>
	ACGIH	TWA Respirable particulate matter	0.2 mg/m <sup>3</sup> , Titanium dioxide
	Further information: A3: Confirmed animal carcinogen with unknown relevance to humans		
	ACGIH	TWA Respirable particulate matter	2.5 mg/m <sup>3</sup> , Titanium dioxide
	Further information: A3: Confirmed animal carcinogen with unknown relevance to humans		
Methylenediphenyl diisocyanate	Dow IHG	TWA	0.005 ppm
	Dow IHG	STEL	0.02 ppm
	OSHA Z-1	C	0.2 mg/m <sup>3</sup> 0.02 ppm
4,4'-Methylenediphenyl diisocyanate	Dow IHG	TWA	0.005 ppm
	Dow IHG	STEL	0.02 ppm
	ACGIH	TWA	0.005 ppm
	OSHA Z-1	C	0.2 mg/m <sup>3</sup> 0.02 ppm
	OSHA Z-3	TWA respirable	10 mg/m <sup>3</sup> / %SiO <sub>2</sub> +2
Quartz	OSHA Z-3	TWA respirable	250 mppcf / %SiO <sub>2</sub> +5
	ACGIH	TWA Respirable particulate matter	0.025 mg/m <sup>3</sup> , Silica
	Further information: A2: Suspected human carcinogen		
	OSHA Z-1	TWA Respirable dust	0.05 mg/m <sup>3</sup>
	OSHA CARC	PEL respirable	0.05 mg/m <sup>3</sup>
	Further information: OSHA specifically regulated carcinogen		
Tosyl isocyanate	Dow IHG	TWA	0.005 ppm
	Dow IHG	STEL	0.02 ppm
Amorphous silica	Dow IHG	TWA Respirable dust	2 mg/m <sup>3</sup>
	Dow IHG	TWA Total dust	6 mg/m <sup>3</sup>
	OSHA Z-3	TWA Dust	20 Million particles per cubic foot, Silica
	OSHA Z-3	TWA Dust	80 mg/m <sup>3</sup> / %SiO <sub>2</sub> , Silica
	OSHA CARC	PEL respirable	0.05 mg/m <sup>3</sup>
	Further information: OSHA specifically regulated carcinogen		

### Exposure controls

**Engineering controls:** Use only with adequate ventilation. Local exhaust ventilation may be necessary for some operations. Provide general and/or local exhaust ventilation to control airborne

## TRI-BUILT 200 PU Sealant

levels below the exposure guidelines. Exhaust systems should be designed to move the air away from the source of vapor/aerosol generation and people working at this point. The odor and irritancy of this material are inadequate to warn of excessive exposure.

### Individual protection measures

**Eye/face protection:** Use safety glasses (with side shields).

#### Skin protection

**Hand protection:** Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Polyethylene. Ethyl vinyl alcohol laminate ("EVAL"). Examples of acceptable glove barrier materials include: Butyl rubber. Avoid gloves made of: Neoprene. Polyvinyl chloride ("PVC" or "vinyl"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Atmospheric levels should be maintained below the exposure guideline. When atmospheric levels may exceed the exposure guideline, use an approved air-purifying respirator equipped with an organic vapor sorbent and a particle filter. For situations where the atmospheric levels may exceed the level for which an air-purifying respirator is effective, use a positive-pressure air-supplying respirator (air line or self-contained breathing apparatus). For emergency response or for situations where the atmospheric level is unknown, use an approved positive-pressure self-contained breathing apparatus or positive-pressure air line with auxiliary self-contained air supply.

The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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### Appearance

<b>Physical state</b>	paste
<b>Color</b>	white
<b>Odor</b>	characteristic
<b>Odor Threshold</b>	No data available
<b>pH</b>	substance/mixture reacts with water
<b>Melting point/range</b>	No data available
<b>Freezing point</b>	No data available
<b>Boiling point (760 mmHg)</b>	No data available
<b>Flash point</b>	<b>closed cup</b> > 100 °C (> 212 °F)
<b>Evaporation Rate (Butyl Acetate = 1)</b>	No data available
<b>Flammability (solid, gas)</b>	Not expected to form explosive dust-air mixtures.
<b>Flammability (liquids)</b>	Not expected to be a static-accumulating flammable liquid.
<b>Lower explosion limit</b>	No data available

**TRI-BUILT 200 PU Sealant**

<b>Upper explosion limit</b>	No data available
<b>Vapor Pressure</b>	No test data available
<b>Relative Vapor Density (air = 1)</b>	No data available
<b>Relative Density (water = 1)</b>	1.53 at 23 °C (73 °F) <i>Estimated.</i>
<b>Water solubility</b>	insoluble
<b>Partition coefficient: n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Decomposition temperature</b>	No data available
<b>Kinematic Viscosity</b>	500000 cSt <i>ASTM D 2196</i>
<b>Explosive properties</b>	No data available
<b>Oxidizing properties</b>	No data available
<b>Molecular weight</b>	No data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

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## 10. STABILITY AND REACTIVITY

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**Reactivity:** Products based on diisocyanates like TDI and MDI react with many materials to release heat. The reaction rate increases with temperature as well as with increased contact; these reactions can become violent. Contact is increased by stirring or if the other material acts as a solvent. Products based on diisocyanates such as TDI and MDI are not soluble in water and will sink to the bottom, but react slowly at the interface. The reaction forms carbon dioxide gas and a layer of solid polyurea.

**Chemical stability:** Stable under recommended storage conditions. See Storage, Section 7.

**Possibility of hazardous reactions:** Can occur. Exposure to elevated temperatures can cause product to decompose and generate gas. This can cause pressure build-up and/or rupturing of closed containers. Polymerization can be catalyzed by: Strong bases. Water.

**Conditions to avoid:** Exposure to elevated temperatures can cause product to decompose. Generation of gas during decomposition can cause pressure in closed systems. Pressure build-up can be rapid. Avoid moisture. Material reacts slowly with water, releasing carbon dioxide which can cause pressure buildup and rupture of closed containers. Elevated temperatures accelerate this reaction.

**Incompatible materials:** Avoid contact with: Acids. Alcohols. Amines. Water. Ammonia. Bases. Metal compounds. Moist air. Strong oxidizers. Products based on diisocyanates like TDI and MDI react with many materials to release heat. The reaction rate increases with temperature as well as with increased contact; these reactions can become violent. Contact is increased by stirring or if the other material acts as a solvent. Products based on diisocyanates such as TDI and MDI are not soluble in water and will sink to the bottom, but react slowly at the interface. The reaction forms carbon dioxide gas and a layer of solid polyurea. Avoid contact with metals such as: Aluminum. Zinc. Brass. Tin. Copper. Galvanized metals. Avoid contact with absorbent materials such as: Moist organic absorbents. Avoid unintended contact with polyols. The reaction of polyols and isocyanates generate heat.



## TRI-BUILT 200 PU Sealant

**Hazardous decomposition products:** Decomposition products depend upon temperature, air supply and the presence of other materials.. Gases are released during decomposition..

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## 11. TOXICOLOGICAL INFORMATION

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*Toxicological information appears in this section when such data are available.*

### Information on likely routes of exposure

Ingestion, Inhalation, Skin contact, Eye contact.

**Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)**

#### Acute oral toxicity

##### Information for the Product:

Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Observations in animals include: Gastrointestinal irritation.

As product: Single dose oral LD50 has not been determined.

Based on information for component(s):  
LD50, > 2,000 mg/kg Estimated.

##### Information for components:

###### Limestone

LD50, Rat, > 6,000 mg/kg

###### Bis-(2-propylheptyl) phthalate

LD50, Rat, male and female, > 5,000 mg/kg OECD 401 or equivalent

###### Methylenediphenyl diisocyanate prepolymer

Typical for this family of materials. Observations in animals include: Gastrointestinal irritation. LD50, Rat, > 2,000 mg/kg Estimated. No deaths occurred at this concentration.

###### Titanium dioxide

LD50, Rat, > 10,000 mg/kg

###### Methylenediphenyl diisocyanate

LD50, Rat, > 2,000 mg/kg No deaths occurred at this concentration.

###### 4,4'-Methylenediphenyl diisocyanate

LD50, Rat, > 2,000 mg/kg No deaths occurred at this concentration.

###### Quartz

For similar material(s): LD50, Rat, > 5,000 mg/kg

###### Tosyl isocyanate

LD50, Rat, male, 2,580 mg/kg

## TRI-BUILT 200 PU Sealant

LD50, Rat, female, 2,234 mg/kg

### Amorphous silica

LD50, Rat, > 5,000 mg/kg

## Acute dermal toxicity

### Information for the Product:

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

As product: The dermal LD50 has not been determined.

Based on information for component(s):  
LD50, > 2,000 mg/kg Estimated.

### Information for components:

#### Limestone

LD50, Rat, > 2,000 mg/kg No deaths occurred at this concentration.

#### Bis-(2-propylheptyl) phthalate

No deaths occurred at this concentration. LD50, Rabbit, > 2,000 mg/kg OECD 402 or equivalent

#### Methylenediphenyl diisocyanate prepolymer

Typical for this family of materials. LD50, Rabbit, > 9,400 mg/kg

#### Titanium dioxide

LD50, Rabbit, 10,000 mg/kg

#### Methylenediphenyl diisocyanate

LD50, Rabbit, > 9,400 mg/kg

#### 4,4'-Methylenediphenyl diisocyanate

LD50, Rabbit, > 9,400 mg/kg

#### Quartz

The dermal LD50 has not been determined.

#### Tosyl isocyanate

The dermal LD50 has not been determined.

#### Amorphous silica

LD50, Rabbit, > 2,000 mg/kg Estimated.

## Acute inhalation toxicity

### Information for the Product:

At room temperature, vapors are minimal due to low volatility. However, certain operations may generate vapor or mist concentrations sufficient to cause respiratory irritation and other adverse effects. Such operations include those in which the material is heated, sprayed or

## TRI-BUILT 200 PU Sealant

otherwise mechanically dispersed such as drumming, venting or pumping. Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs. May cause pulmonary edema (fluid in the lungs.) Effects may be delayed. Decreased lung function has been associated with overexposure to isocyanates.

As product: The LC50 has not been determined.

### Information for components:

#### Limestone

Maximum attainable concentration. LC50, Rat, 4 Hour, dust/mist, > 3.0 mg/l No deaths occurred at this concentration.

#### Bis-(2-propylheptyl) phthalate

LD50, Rat, male and female, 1 Hour, dust/mist, > 20.5 mg/l OECD Test Guideline 403

#### Methylenediphenyl diisocyanate prepolymer

The LC50 has not been determined.

#### Titanium dioxide

LC50, Rat, male, 4 Hour, dust/mist, > 6.82 mg/l No deaths occurred at this concentration.

#### Methylenediphenyl diisocyanate

LC50, Rat, 1 Hour, dust/mist, 2.24 mg/l

#### 4,4'-Methylenediphenyl diisocyanate

LC50, Rat, 1 Hour, dust/mist, 2.24 mg/l

#### Quartz

The LC50 has not been determined.

#### Tosyl isocyanate

Result reported is from the highest dose tested. LC0, Rat, 4 Hour, > 2.79 mg/l Estimated.

#### Amorphous silica

Maximum attainable concentration. LC50, Rat, 4 Hour, dust/mist, > 2.08 mg/l OECD Test Guideline 403 No deaths occurred at this concentration.

## Skin corrosion/irritation

### Information for the Product:

Based on information for component(s):  
Prolonged contact may cause skin irritation with local redness.  
Material may stick to skin causing irritation upon removal.  
May stain skin.

### Information for components:

#### Limestone

Essentially nonirritating to skin.

## TRI-BUILT 200 PU Sealant

May cause drying and flaking of the skin.

### **Bis-(2-propylheptyl) phthalate**

Essentially nonirritating to skin.

### **Methylenediphenyl diisocyanate prepolymer**

Prolonged contact may cause skin irritation with local redness.

Material may stick to skin causing irritation upon removal.

May stain skin.

### **Titanium dioxide**

Essentially nonirritating to skin.

### **Methylenediphenyl diisocyanate**

Prolonged contact may cause moderate skin irritation with local redness.

Repeated contact may cause moderate skin irritation with local redness.

May stain skin.

### **4,4'-Methylenediphenyl diisocyanate**

Prolonged contact may cause moderate skin irritation with local redness.

Repeated contact may cause moderate skin irritation with local redness.

May stain skin.

### **Quartz**

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the skin.

### **Tosyl isocyanate**

Prolonged contact may cause slight skin irritation with local redness.

### **Amorphous silica**

Brief contact is essentially nonirritating to skin.

May cause skin irritation due to mechanical abrasion.

May cause drying and flaking of the skin.

## Serious eye damage/eye irritation

### Information for the Product:

Based on information for component(s):

May cause eye irritation.

May cause slight temporary corneal injury.

### Information for components:

#### **Limestone**

May cause slight temporary eye irritation.

Dust may irritate eyes.

#### **Bis-(2-propylheptyl) phthalate**

Essentially nonirritating to eyes.

#### **Methylenediphenyl diisocyanate prepolymer**

May cause eye irritation.

**TRI-BUILT 200 PU Sealant****Methylenediphenyl diisocyanate prepolymer**

Skin contact may cause an allergic skin reaction.

Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

May cause allergic respiratory reaction.

MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.

Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

**Titanium dioxide**

Did not demonstrate the potential for contact allergy in mice.

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

**Methylenediphenyl diisocyanate**

For skin sensitization:

Skin contact may cause an allergic skin reaction.

Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

For respiratory sensitization:

May cause allergic respiratory reaction.

MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.

Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

**4,4'-Methylenediphenyl diisocyanate**

For skin sensitization:

Skin contact may cause an allergic skin reaction.

Animal studies have shown that skin contact with isocyanates may play a role in respiratory sensitization.

For respiratory sensitization:

May cause allergic respiratory reaction.

MDI concentrations below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized.

Asthma-like symptoms may include coughing, difficult breathing and a feeling of tightness in the chest. Occasionally, breathing difficulties may be life threatening.

**Quartz**

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

**Tosyl isocyanate**

For similar material(s):

## TRI-BUILT 200 PU Sealant

Did not demonstrate the potential for contact allergy in mice.

May cause allergic respiratory reaction.

### **Amorphous silica**

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

## Specific Target Organ Systemic Toxicity (Single Exposure)

### Information for the Product:

Product test data not available.

### Information for components:

#### **Limestone**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Bis-(2-propylheptyl) phthalate**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Methylenediphenyl diisocyanate prepolymer**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Titanium dioxide**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Methylenediphenyl diisocyanate**

May cause respiratory irritation.

Route of Exposure: Inhalation

Target Organs: Respiratory Tract

#### **4,4'-Methylenediphenyl diisocyanate**

May cause respiratory irritation.

Route of Exposure: Inhalation

Target Organs: Respiratory Tract

#### **Quartz**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Tosyl isocyanate**

May cause respiratory irritation.

Route of Exposure: Inhalation

Target Organs: Respiratory Tract

#### **Amorphous silica**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

## Aspiration Hazard

## TRI-BUILT 200 PU Sealant

### Information for the Product:

Based on physical properties, not likely to be an aspiration hazard.

### Information for components:

#### Limestone

Based on physical properties, not likely to be an aspiration hazard.

#### Bis-(2-propylheptyl) phthalate

Based on physical properties, not likely to be an aspiration hazard.

#### Methylenediphenyl diisocyanate prepolymer

Based on physical properties, not likely to be an aspiration hazard.

#### Titanium dioxide

Based on physical properties, not likely to be an aspiration hazard.

#### Methylenediphenyl diisocyanate

Based on physical properties, not likely to be an aspiration hazard.

#### 4,4'-Methylenediphenyl diisocyanate

Based on physical properties, not likely to be an aspiration hazard.

#### Quartz

Based on physical properties, not likely to be an aspiration hazard.

#### Tosyl isocyanate

May be harmful if swallowed and enters airways.

#### Amorphous silica

Based on physical properties, not likely to be an aspiration hazard.

**Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)**

### Specific Target Organ Systemic Toxicity (Repeated Exposure)

#### Information for the Product:

Product test data not available.

#### Information for components:

#### Limestone

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

#### Bis-(2-propylheptyl) phthalate

Excessive exposure may cause irritation to upper respiratory tract (nose and throat) and lungs.

#### Methylenediphenyl diisocyanate prepolymer

**TRI-BUILT 200 PU Sealant**

Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

**Titanium dioxide**

Repeated excessive inhalation exposures to dusts may cause respiratory effects.

In animals, effects have been reported on the following organs:

Lung.

**Methylenediphenyl diisocyanate**

Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

**4,4'-Methylenediphenyl diisocyanate**

Tissue injury in the upper respiratory tract and lungs has been observed in laboratory animals after repeated excessive exposures to MDI/polymeric MDI aerosols.

**Quartz**

In humans, effects have been reported on the following organs:

Kidney.

Repeated excessive exposure to crystalline silica may cause silicosis, a progressive and disabling disease of the lungs.

**Tosyl isocyanate**

No relevant data found.

**Amorphous silica**

Diatomaceous earth or amorphous silica is considered a nuisance dust and does not cause the lung injury associated with crystalline silica. However, repeated excessive exposures to dust of amorphous silica (which is the main component in this product) may cause potentially reversible lung effects.

Repeated exposures to dusts of this material are not anticipated to result in systemic toxicity or permanent lung injury; however, excessive exposures may cause less severe respiratory effects.

**Carcinogenicity****Information for the Product:**

Product test data not available.

**Information for components:****Limestone**

No relevant data found.

**Bis-(2-propylheptyl) phthalate**

No relevant data found.

**Methylenediphenyl diisocyanate prepolymer**

Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m<sup>3</sup>) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.



## TRI-BUILT 200 PU Sealant

### Titanium dioxide

Lung fibrosis and tumors have been observed in rats exposed to titanium dioxide in two lifetime inhalation studies. Effects are believed to be due to overloading of the normal respiratory clearance mechanisms caused by the extreme study conditions. Workers exposed to titanium dioxide in the workplace have not shown an unusual incidence of chronic respiratory disease or lung cancer. Titaniumdioxide was not carcinogenic in laboratory animals in lifetime feeding studies.

### Methylenediphenyl diisocyanate

Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m<sup>3</sup>) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

### 4,4'-Methylenediphenyl diisocyanate

Lung tumors have been observed in laboratory animals exposed to respirable aerosol droplets of MDI/Polymeric MDI (6 mg/m<sup>3</sup>) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects reported for MDI.

### Quartz

Has caused cancer in humans. Has caused cancer in laboratory animals.

### Tosyl isocyanate

No relevant data found.

### Amorphous silica

Animal testing and human experience demonstrate no significant risk of human cancer from exposure to relatively pure amorphous silica.

<b>Carcinogenicity Component</b>	<b>List</b>	<b>Classification</b>
<b>Titanium dioxide</b>	IARC	Group 2B: Possibly carcinogenic to humans
	ACGIH	A3: Confirmed animal carcinogen with unknown relevance to humans.
<b>Quartz</b>	IARC	Group 1: Carcinogenic to humans
	US NTP	Known to be human carcinogen
	OSHA CARC	OSHA specifically regulated carcinogen
	ACGIH	A2: Suspected human carcinogen
<b>Amorphous silica</b>	OSHA CARC	OSHA specifically regulated carcinogen

### Teratogenicity

#### Information for the Product:

Product test data not available.

#### Information for components:

### Limestone

Did not cause birth defects or any other fetal effects in laboratory animals.

### Bis-(2-propylheptyl) phthalate

## TRI-BUILT 200 PU Sealant

Did not cause birth defects or any other fetal effects in laboratory animals.

### **Methylenediphenyl diisocyanate prepolymer**

In laboratory animals, MDI/polymeric MDI did not cause birth defects; other fetal effects occurred only at high doses which were toxic to the mother.

### **Titanium dioxide**

No relevant data found.

### **Methylenediphenyl diisocyanate**

Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

### **4,4'-Methylenediphenyl diisocyanate**

Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

### **Quartz**

For similar material(s): Did not cause birth defects or any other fetal effects in laboratory animals.

### **Tosyl isocyanate**

Has been toxic to the fetus in laboratory animals at doses toxic to the mother. Did not cause birth defects in laboratory animals.

### **Amorphous silica**

Did not cause birth defects or any other fetal effects in laboratory animals.

## Reproductive toxicity

### **Information for the Product:**

Product test data not available.

### **Information for components:**

#### **Limestone**

In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

#### **Bis-(2-propylheptyl) phthalate**

In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

#### **Methylenediphenyl diisocyanate prepolymer**

No specific, relevant data available for assessment.

#### **Titanium dioxide**

No relevant data found.

#### **Methylenediphenyl diisocyanate**

No relevant data found.

#### **4,4'-Methylenediphenyl diisocyanate**

## TRI-BUILT 200 PU Sealant

No relevant data found.

### Quartz

No relevant data found.

### Tosyl isocyanate

In laboratory animals, excessive doses toxic to the parent animals caused decreased weight and survival of offspring.

### Amorphous silica

No relevant data found.

## Mutagenicity

### Information for the Product:

Product test data not available.

### Information for components:

#### Limestone

In vitro genetic toxicity studies were negative.

#### Bis-(2-propylheptyl) phthalate

In vitro genetic toxicity studies were negative.

#### Methylenediphenyl diisocyanate prepolymer

Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

#### Titanium dioxide

In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

#### Methylenediphenyl diisocyanate

Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

#### 4,4'-Methylenediphenyl diisocyanate

Genetic toxicity data on MDI are inconclusive. MDI was weakly positive in some in vitro studies; other in vitro studies were negative. Animal mutagenicity studies were predominantly negative.

#### Quartz

In vitro genetic toxicity studies were negative in some cases and positive in other cases.

#### Tosyl isocyanate

In vitro genetic toxicity studies were negative. For similar material(s): Animal genetic toxicity studies were negative.

#### Amorphous silica

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

## TRI-BUILT 200 PU Sealant

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## 12. ECOLOGICAL INFORMATION

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*Ecotoxicological information appears in this section when such data are available.*

### Toxicity

#### Limestone

##### **Acute toxicity to fish**

Material is practically non-toxic to fish on an acute basis (LC50 > 100 mg/L).  
LC50, Gambusia affinis (Mosquito fish), static test, 96 Hour, > 56,000 mg/l

#### Bis-(2-propylheptyl) phthalate

##### **Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis  
(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).  
LC50, Danio rerio (zebra fish), static test, 96 Hour, > 10,000 mg/l, OECD Test Guideline 203

##### **Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna (Water flea), static test, 48 Hour, > 100 mg/l

##### **Acute toxicity to algae/aquatic plants**

NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, 25 mg/l  
EC50, Desmodesmus subspicatus (green algae), static test, 72 Hour, > 100 mg/l

##### **Toxicity to bacteria**

EC50, activated sludge, static test, 3 Hour, > 1,000 mg/l

##### **Chronic toxicity to aquatic invertebrates**

NOEC, Daphnia magna (Water flea), semi-static test, 21 d, > 1 mg/l

#### Methylenediphenyl diisocyanate prepolymer

##### **Acute toxicity to fish**

Not expected to be acutely toxic to aquatic organisms.

#### Titanium dioxide

##### **Acute toxicity to fish**

Material is practically non-toxic to aquatic organisms on an acute basis  
(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).  
NOEC, Leuciscus idus (Golden orfe), static test, 48 Hour, > 1,000 mg/l

##### **Acute toxicity to aquatic invertebrates**

EC50, Daphnia magna (Water flea), static test, 48 Hour, > 1,000 mg/l

##### **Acute toxicity to algae/aquatic plants**

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, > 100 mg/l, OECD Test Guideline 201

#### Methylenediphenyl diisocyanate

##### **Acute toxicity to fish**

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species.

**TRI-BUILT 200 PU Sealant**

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Based on information for a similar material:

LC50, Danio rerio (zebra fish), static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

Based on information for a similar material:

EC50, Daphnia magna (Water flea), static test, 24 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

Based on information for a similar material:

NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, 1,640 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**

Based on information for a similar material:

EC50, activated sludge, static test, 3 Hour, Respiration rates., > 100 mg/l

**Toxicity to soil-dwelling organisms**

EC50, Eisenia fetida (earthworms), Based on information for a similar material:, 14 d, > 1,000 mg/kg

**Toxicity to terrestrial plants**

EC50, Avena sativa (oats), Growth inhibition, 1,000 mg/l

EC50, Lactuca sativa (lettuce), Growth inhibition, 1,000 mg/l

**4,4'-Methylenediphenyl diisocyanate****Acute toxicity to fish**

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species.

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Based on information for a similar material:

LC50, Danio rerio (zebra fish), static test, 96 Hour, > 1,000 mg/l, OECD Test Guideline 203 or Equivalent

**Acute toxicity to aquatic invertebrates**

Based on information for a similar material:

EC50, Daphnia magna (Water flea), static test, 24 Hour, > 1,000 mg/l, OECD Test Guideline 202 or Equivalent

**Acute toxicity to algae/aquatic plants**

Based on information for a similar material:

NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate inhibition, 1,640 mg/l, OECD Test Guideline 201 or Equivalent

**Toxicity to bacteria**

Based on information for a similar material:

EC50, activated sludge, static test, 3 Hour, Respiration rates., > 100 mg/l

**Chronic toxicity to aquatic invertebrates**

Based on data from similar materials

## TRI-BUILT 200 PU Sealant

NOEC, *Daphnia magna* (Water flea), 21 d, 10 mg/l

### Toxicity to soil-dwelling organisms

EC50, *Eisenia fetida* (earthworms), Based on information for a similar material:, 14 d, > 1,000 mg/kg

### Toxicity to terrestrial plants

EC50, *Avena sativa* (oats), Growth inhibition, 1,000 mg/l

EC50, *Lactuca sativa* (lettuce), Growth inhibition, 1,000 mg/l

## Quartz

### Acute toxicity to fish

Based on information for a similar material:

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

For similar material(s):

LC50, *Danio rerio* (zebra fish), 96 Hour, 5,000 - 10,000 mg/l

### Acute toxicity to aquatic invertebrates

For similar material(s):

EC50, *Daphnia magna* (Water flea), 48 Hour, 731 mg/l

For similar material(s):

EC50, *Daphnia magna* (Water flea), 24 Hour, > 1,000 mg/l

### Acute toxicity to algae/aquatic plants

For similar material(s):

EC50, *Pseudokirchneriella subcapitata* (green algae), 72 Hour, Biomass, 440 mg/l

## Tosyl isocyanate

### Acute toxicity to fish

The measured ecotoxicity is that of the hydrolyzed product, generally under conditions maximizing production of soluble species.

Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

LC50, *Oryzias latipes* (Orange-red killifish), semi-static test, 96 Hour, 435 mg/l, OECD Test Guideline 203 or Equivalent

### Acute toxicity to aquatic invertebrates

EC50, *Daphnia magna* (Water flea), 24 Hour, 150 mg/l, OECD Test Guideline 202 or Equivalent

### Acute toxicity to algae/aquatic plants

For similar material(s):

ErC50, *Pseudokirchneriella subcapitata* (green algae), 72 Hour, Growth rate inhibition, 30 mg/l, OECD Test Guideline 201

## Amorphous silica

### Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, *Danio rerio* (zebra fish), 96 Hour, 5,000 - 10,000 mg/l

### Acute toxicity to aquatic invertebrates

EC50, *Daphnia magna* (Water flea), 24 Hour, > 1,000 mg/l

## TRI-BUILT 200 PU Sealant

### **Acute toxicity to algae/aquatic plants**

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, Biomass, 440 mg/l

### **Persistence and degradability**

#### **Limestone**

**Biodegradability:** Biodegradation is not applicable.

#### **Bis-(2-propylheptyl) phthalate**

**Biodegradability:** Material is readily biodegradable. Passes OECD test(s) for ready biodegradability.

10-day Window: Pass

**Biodegradation:** 80 - 90 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301B

#### **Photodegradation**

**Sensitization:** OH radicals

**Atmospheric half-life:** 0.387 d

**Method:** Estimated.

#### **Methylenediphenyl diisocyanate prepolymer**

**Biodegradability:** Expected to degrade slowly in the environment.

#### **Titanium dioxide**

**Biodegradability:** Biodegradation is not applicable.

#### **Methylenediphenyl diisocyanate**

**Biodegradability:** In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

10-day Window: Not applicable

**Biodegradation:** 0 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 302C or Equivalent

#### **4,4'-Methylenediphenyl diisocyanate**

**Biodegradability:** In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

10-day Window: Not applicable

**Biodegradation:** 0 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 302C or Equivalent

#### **Quartz**

**Biodegradability:** Biodegradation is not applicable.

#### **Tosyl isocyanate**

**Biodegradability:** In the aquatic and terrestrial environment, material reacts with water forming predominantly insoluble polyureas which appear to be stable. In the atmospheric

## TRI-BUILT 200 PU Sealant

environment, material is expected to have a short tropospheric half-life, based on calculations and by analogy with related diisocyanates.

Based on information for a similar material: Material is expected to be readily biodegradable.

For similar material(s):

**Biodegradation:** 86 %

**Exposure time:** 28 d

**Method:** OECD Test Guideline 301D

**Theoretical Oxygen Demand:** 2.06 mg/mg

### **Stability in Water (1/2-life)**

Hydrolysis, half-life, < 10 min, pH 4 - 9, Half-life Temperature 25 °C, Estimated.

### **Amorphous silica**

**Biodegradability:** Biodegradation is not applicable.

### **Bioaccumulative potential**

#### **Limestone**

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

#### **Bis-(2-propylheptyl) phthalate**

**Bioaccumulation:** Bioconcentration potential is low (BCF less than 100 or log Pow greater than 7).

**Partition coefficient: n-octanol/water(log Pow):** > 6.00 Measured

**Bioconcentration factor (BCF):** 76 Estimated.

#### **Methylenediphenyl diisocyanate prepolymer**

**Bioaccumulation:** In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

#### **Titanium dioxide**

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

#### **Methylenediphenyl diisocyanate**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Reacts with water. In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

**Bioconcentration factor (BCF):** 92 Cyprinus carpio (Carp) 28 d

#### **4,4'-Methylenediphenyl diisocyanate**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Reacts with water. In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

**Bioconcentration factor (BCF):** 92 Cyprinus carpio (Carp) 28 d

#### **Quartz**

**Bioaccumulation:** Partitioning from water to n-octanol is not applicable.

#### **Tosyl isocyanate**

**Bioaccumulation:** In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas. Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water(log Pow):** 0.82 Estimated.



## TRI-BUILT 200 PU Sealant

### Amorphous silica

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

**Partition coefficient: n-octanol/water(log Pow):** 0.53

**Bioconcentration factor (BCF):** 3.16

### **Mobility in soil**

### Limestone

No relevant data found.

### Bis-(2-propylheptyl) phthalate

**Partition coefficient (Koc):** 426580 Measured

### Methylenediphenyl diisocyanate prepolymer

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

### Titanium dioxide

No data available.

### Methylenediphenyl diisocyanate

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

### 4,4'-Methylenediphenyl diisocyanate

In the aquatic and terrestrial environment, movement is expected to be limited by its reaction with water forming predominantly insoluble polyureas.

### Quartz

No relevant data found.

### Tosyl isocyanate

**Partition coefficient (Koc):** 240 Estimated.

### Amorphous silica

**Partition coefficient (Koc):** 21.73

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## 13. DISPOSAL CONSIDERATIONS

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**Disposal methods:** DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN SDS SECTION 1: Identified Uses. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Recycler. Reclaimer. Incinerator or other thermal destruction device. For additional information, refer

## TRI-BUILT 200 PU Sealant

to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section 10 Regulatory Information, MSDS Section 15

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### 14. TRANSPORT INFORMATION

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#### DOT

Not regulated for transport

#### Classification for SEA transport (IMO-IMDG):

	Not regulated for transport
<b>Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code</b>	Consult IMO regulations before transporting ocean bulk

#### Classification for AIR transport (IATA/ICAO):

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

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### 15. REGULATORY INFORMATION

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#### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Respiratory or skin sensitisation  
Carcinogenicity

#### Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### Pennsylvania Worker and Community Right-To-Know Act:

The following chemicals are listed because of the additional requirements of Pennsylvania law:

Components	CASRN
Limestone	1317-65-3
Titanium dioxide	13463-67-7

**TRI-BUILT 200 PU Sealant**

**California Prop. 65**

WARNING: This product can expose you to chemicals including Titanium dioxide, Quartz, which is/are known to the State of California to cause cancer, and Methanol, which is/are known to the State of California to cause birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

**United States TSCA Inventory (TSCA)**

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

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**16. OTHER INFORMATION**

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**Revision**

Identification Number: 99213010 / A001 / Issue Date: 08/03/2023 / Version: 1.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.

**Legend**

ACGIH	USA. ACGIH Threshold Limit Values (TLV)
C	Ceiling
Dow IHG	Dow Industrial Hygiene Guideline
OSHA CARC	OSHA Specifically Regulated Chemicals/Carcinogens
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3	USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
PEL	Permissible exposure limit (PEL)
STEL	Short term exposure limit
TWA	Time weighted average

**Full text of other abbreviations**

AIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No

**TRI-BUILT 200 PU Sealant**

Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

**Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

THE DOW CHEMICAL COMPANY urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.

US