

# **Polyurethane Construction Adhesive**

MATERIAL SAFETY DATA SHEET (Complies with OSHA 29 CFR 1910.1200)

### **SECTION I: PRODUCT IDENTIFICATION**

The QUIKRETE® Companies
One Securities Centre

Emergency Telephone Number

(770) 216-9580

3490 Piedmont Road, Suite 1300

Atlanta, GA 30329 Information Telephone Number

(770) 216-9580

MSDS X3

Revision: Feb-10

QUIKRETE® Product Name
POLYURETHANE CONSTRUCTION ADHESIVE
9902-10

PRODUCT USE: ADHESIVE FOR USE IN GENERAL CONSTRUCTION



### **SECTION II – HAZARDS IDENTIFICATION**

Please note that as a service to our customers, hazard warnings and information have been included for ALL chemicals listed in this MSDS. However, not all of these chemicals are defined as "hazardous" by ISO or OSHA standards. Only those chemicals listed in Section 2 of this MSDS are defined by ISO and/or OSHA as "hazardous" based upon the properties and concentrations of each chemical.

### **MOST IMPORTANT HAZARDS**

**EYE:** Direct contact irritates moderately with redness and swelling. Calcium carbonate.

xylene, calcium oxide, and MDI may cause severe eye irritation, especially in dust form. Butyl benzyl phthalate (BBP) may cause irritation with symptoms of redness

and itching.

**SKIN:** A single short exposure (less than 24 hours) may irritate. Repeated prolonged

contact (24 to 48 hours) may irritate moderately. Product contains calcium carbonate, xylene, and calcium oxide, which are possible skin sensitizers.

Contact with BBP may cause irritation with symptoms of redness and itching. MDI may cause irritation to the skin or mucous membranes. Ethyl benzene may be

absorbed through the skin.

**INHALATION:** Vapor overexposure, and/or inhalation of silica or calcium oxide dust may severely

irritate eyes, nose, throat, upper respiratory tract, and lungs. Vapor overexposure



may cause drowsiness. Excessive inhalation of calcium carbonate (dust form) may result in shortness of breath or reduced pulmonary function. Inhalation of high concentrations of BBP, xylene, or ethyl benzene may cause respiratory irritation or difficulties and central nervous system effects characterized by headache, nausea, dizziness, and/or drowsiness. MDI vapors or mist can cause irritation of upper respiratory tract: signs/symptoms can include soreness of the nose and throat, coughing, and sneezing. Persons previously sensitized to isocyanates may experience an allergic respiratory reaction: signs/symptoms can include difficulty breathing, wheezing, tightness of chest, and respiratory failure. Overexposure to titanium dioxide (dust form) may cause pulmonary fibrosis (scarring of the lungs).

**ORAL:** Small amounts transferred to the mouth by fingers during use, etc. should not injure. Swallowing large amounts may cause digestive discomfort and gastrointestinal irritation. Ingestion of BBP may cause central nervous system depression with symptoms seen in acute inhalation. Ingestion of xylene may cause central nervous system effects. Aspiration of xylene or ethyl benzene into lungs may cause chemical pneumonitis.

### **SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

This product consists of a mixture/preparation.

CAS	INGREDIENT		LETHAL DOSES			<b>EXPOS</b>	URE L	IMITS		
NO.		%								
					Т	WA	ST	EL	Ce	iling
					ppm	mg/m <sup>3</sup>	ppm	mg/m³	ppm	mg/m³
85-68-7	Butyl Benzyl Phthalate	15-40	Inhalation TCLo -	OSHA		osure limit	guidelin	es have	been es	tablished
	(BBP)		789 mg/m <sup>3</sup> /6hr (rat)			material.				
			Oral LD50 –	NIOSH						
			2,330 mg/kg (rat)							
			Dermal LD50 –	ACGIH						
			6,700 mg/kg (rat)	CANADA		l b	I	1	T	
1317-65-	Calcium Carbonate a	3-7	Oral LD50 –	OSHA	-	15, 5 <sup>b</sup>	-	-	-	-
3	(Limestone)		7,340 mg/kg (rat)	NIOSH	-	10, 5 <sup>b</sup>	-	-	-	-
				ACGIH	-	10	-	-	-	-
				CANADA	-	10, 5 <sup>b</sup>	-	-	-	-
1305-78-	Calcium Oxide <sup>a</sup>	1-5	Not established	OSHA	-	5	-	-	-	-
8				NIOSH	-	2 <sup>c</sup>	-	-	-	-
				ACGIH	-	2	-	-	-	-
				CANADA		2	-	4	-	-
13463- 67-7	Titanium dioxide <sup>a</sup>	1-5	Inhalation TCLo – 250 mg/m³/6hr (rat)	OSHA		15 <sup>d</sup>	-	-	-	-
			Oral LD50 -	NIOSH	е	-	-	-	-	-
			>24,000 mg/kg (rat)							
			Dermal LD50 -	ACGIH		10	-	-	-	-
			>10,000 mg/m <sup>3</sup> (rabbit)	CANADA		10, 5 <sup>b</sup>	-	-	-	-
1330-20- 7	Xylene	1-5	Inhalation LC50 – 5,000 ppm/4hr (rat)	OSHA	100	435	-	-	-	-



CAS NO.	INGREDIENT	WT %	LETHAL DOSES	EXPOSURE LIMITS							
					Т	WA	ST	STEL		Ceiling	
					ppm	mg/m³	ppm	mg/m³	ppm	mg/m³	
			Oral LD50 – 4,300 mg/kg (rat)	NIOSH	100	435	150	655	-	-	
			Dermal LD50 -	ACGIH 1	100	434	150	651	-	-	
			>1,700 mg/kg (rabbit)	CANADA	_	434	150	652	-	-	
101-68-8	Diphenylmethane diisocyanate (MDI)	0.5- 1.5	Inhalation LC50 – 178 mg/m³ (rat)	OSHA	-	-	-	-	0.02	0.2	
	disocyanate (MDI)	1.5		NIOSH	0.005	0.050	-	-	0.020 <sup>g</sup>	0.2 <sup>g</sup>	
			Oral LD50 – 2,200 mg/kg (mouse)	ACGIH	0.005	0.051	-	-	-	-	
				CANAD A	0.005	0.051	-	-	0.02	0.2	
100-41-4	Ethyl benzene	0.1-	Oral LD50 -								
		1.0	3,500 mg/kg (rat)	OSHA	100	435	-	-	-	-	
			Dermal LD50 – 17,800 µL/kg (rabbit)	NIOSH	100	435	125	545	-	-	
			Inhalation LCLo -	ACGIH f	100	434	125	543	-	-	
			4,000 ppm/4hr (rat)	CANAD A	100	434	125	542	-	-	
14808- 60-7	Silica, crystalline <sup>a</sup> < (Silica, quartz)	< 0.1	Implant TDLo – 900 mg/kg (rat)	OSHA	-	30, 10 b,	-	-	-	-	
			5 5 5 mg// g (1 m/)	NIOSH	-	0.5	-	-	-	-	
			Inhalation TCLo – 300 µg/m³ (human)	ACGIH	-	0.5 <sup>i</sup>	-	-	-	-	
			Intravenous LDLo – 40 mg/kg (mouse)	CANAD A	-	0.3, 0.1	-	-	-	-	

<sup>&</sup>lt;sup>a</sup> Under normal conditions of use, no respirable particles should be released from this product.

# **SECTION IV - FIRST-AID PROCEDURES**

**INHALATION:** Remove to fresh air. If ill effects persist get medical attention.

**SKIN CONTACT:** Remove from skin and wash thoroughly with soap and water or waterless

cleanser. Get medical attention if irritation or other ill effects develop or persist.

<sup>&</sup>lt;sup>b</sup> Total mass; respirable mass, respectively.

<sup>&</sup>lt;sup>c</sup> NIOSH permissible exposure limits for calcium oxide are as follows: TWA 2 mg/m<sup>3</sup>; IDLH 25 mg/m<sup>3</sup>

d OSHA - Total dust.

<sup>&</sup>lt;sup>e</sup> NIOSH – No threshold has been determined; limit occupational exposure to lowest feasible concentration.

<sup>&</sup>lt;sup>f</sup> ACGIH – Biological Exposure Index (BEI).

<sup>&</sup>lt;sup>g</sup> NIOSH – Value based on an exposure time of 10 minutes.

<sup>&</sup>lt;sup>h</sup> OSHA PEL: Silica, Crystalline (Silica, Quartz) – respirable dust: TWA 10 mg/m³ divided by (%SiO<sub>2</sub>+2); total dust: TWA 30 mg/m³ divided by (%SiO<sub>2</sub>+2) (Source: NIOSH Pocket Guide to Hazardous Chemicals).

Respirable mass.



**EYE CONTACT:** Immediately flush with water for 15 minutes. Get medical attention.

**INGESTION:** Get medical attention.

**COMMENTS:** Treat according to person's condition and specifics of exposure.

# **SECTION V - FIRE-FIGHTING MEASURES**

**SUITABLE EXTINGUISHING MEDIA:** Carbon Dioxide (CO<sub>2</sub>), water fog dry chemical, foam.

**UNSUITABLE EXTINGUISHING MEDIA: Water.** 

**SPECIFIC FIRE HAZARDS:** Precipitated calcium carbonate will ignite on contact with

fluorine.

**FIRE FIGHTING PROCEDURES:** Wear full protective clothing including helmet, self contained,

positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist, and legs, face mask, and protective covering for exposed areas of the head. Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces

cool and prevent explosive rupture. If large amount is

involved, evacuate area.

FLASH POINT (SETAFLASH): Greater than 65°C (150°F)

FLAMMABILITY LIMITS IN AIR (XYLENE): LEL: 1%

UEL: 8%

HAZARDOUS DECOMPOSITION

**PRODUCTS:** By high heat and fire: oxides of carbon, oxides of nitrogen,

and isocyanates.

### SECTION VI – ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Observe all personal protective equipment recommendations

described in Sections 5 and 8.

**ENVIRONMENTAL PRECAUTIONS:** Disposal of collected product, residues, and cleanup materials

may be governmentally regulated. Observe all applicable local,

state and federal waste management regulations.

METHODS FOR CLEANING UP: Ventilate area. Extinguish all ignition sources. Contain spill.

Evacuate unprotected personnel from hazard area. Cover with absorbent, place in approved drum; do not seal drum for 48 hours to avoid possible pressure build-up. Local, state, and federal reporting requirements may apply to spills or releases of this material into the environment. See applicable regulatory compliance information in

Section 15.



### **SECTION VII – HANDLING AND STORAGE**

**HANDLING:** Assure good ventilation

**STORAGE:** Eliminate sources of ignition. Store in original sealed containers

away from heat and moisture. Shelf-life 12 months at 73°F and

50% relative humidity.

### SECTION VIII – EXPOSURE CONTROL AND PERSONAL PROTECTION

**ENGINEERING CONTROLS:** 

LOCAL EXHAUST: Recommended Recommended

PERSONAL PROTECTIVE EQUIPMENT:

EYE PROTECTION: Avoid eye contact. Use proper protection - safety glasses as a

minimum.

SKIN AND BODY PROTECTION: Avoid skin contact. Protect hands with impervious rubber gloves

and wear typical full cover clothing. Gloves must be checked before each use for signs of degradation and penetration and for proper functioning. Wear appropriate gloves when handling this product.

RESPIRATORY PROTECTION: Avoid breathing of vapors. Wear appropriate, properly fitted

NIOSH/MSHA approved respirator when the airborne contaminant levels exceed the exposure limits indicated on the MSDS. Follow respirator manufacturer's directions for respirator use. Industrial hygiene personnel can assist in judging the adequacy of existing

engineering controls.

HYGIENE MEASURES (INGESTION): Wash hands after handling and before eating.

**PRECAUTIONARY MEASURES:** Avoid eye contact. Avoid skin contact. Avoid breathing vapor.

Keep container closed. Do not take internally.

Note: These precautions are for room temperature handling. Use at elevated temperatures or aerosol

spray applications may require added precautions.

### **SECTION IX – PHYSICAL AND CHEMICAL PROPERTIES**

PHYSICAL FORM: Solid (Paste)
COLOR: Various

ODOR: Slight odor of xylene PH: Not Applicable

BOILING POINT (AT 760 MM HG): Not Applicable

**FLASHPOINT:** Greater than 65°C (150°F)

**EXPLOSION PROPERTIES:**VAPOR PRESSURE (AT 100°F):
Not Determined
Not Applicable



**VAPOR DENSITY:** 3.66 (Xylene) **DENSITY:** 10.7 lb/gal

SOLUBILITY IN WATER (%): NIL SPECIFIC GRAVITY (AT 77°F/25°C): 1.28

VISCOSITY (AT 77°F/25°C): Greater than 700,000 cps (@ 2 rpm)

FREEZING / MELTING POINT:
ODOR THRESHOLD:
Not Applicable
Not Applicable
Not Applicable
Not Applicable
Less than 6%

**VOLATILE ORGANIC CONTENT (VOC):** 3.53% by weight; 45 g/L (0.38 lbs/gal)

NOTE: The above information is not intended for use in preparing product specifications.

### SECTION X – STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

**HAZARDOUS POLYMERIZATION:** Hazardous polymerization will not occur.

**CONDITIONS TO AVOID:** Exposure to air or moisture until ready to use. Store

away from water or moisture as this will lead to

premature curing of the material.

MATERIALS TO AVOID: Amines, alcohol, and water will react with this

material. Water reacts with this material to form carbon dioxide, which could result in the buildup of pressure in a sealed container. But it is highly unlikely that enough water will mix-in to form enough carbon dioxide to present a hazardous situation. Avoid

oxidizers.

**INCOMPATIBILITY:**Note that precipitated calcium carbonate will ignite on

contact with fluorine. It is incompatible with acids, alum, ammonia salts, and mercury + hydrogen

mixtures.

HAZARDOUS DECOMPOSITION

**PRODUCTS:** Oxides of carbon and oxides of nitrogen, isocyanates.

Also possible are oxides of sulfur, phenol, and

hydrogen cyanide.

### **SECTION XI – TOXICOLOGICAL INFORMATION**

May cause respiratory sensitization, eye and skin irritation. May cause allergic respiratory and/or allergic skin reaction. See Section 2 for exposure limits, Section 3 for exposure effects.

**ACUTE TOXICITY:** 

FOR BUTYL BENZYL PHTHALATE: Inhalation TCLo – 789 mg/m<sup>3</sup>/6hr (rat)

Oral LD50 – 2,330 mg/kg (rat) Dermal LD50 – 6,700 mg/kg (rat)



FOR CALCIUM CARBONATE: Oral LD50 – 7,340 mg/kg (rat)

FOR CALCIUM OXIDE: Not established.

FOR TITANIUM DIOXIDE: Inhalation TCLo – 250 mg/m<sup>3</sup>/6hr (rat)

Oral LD50 - >24,000 mg/kg (rat)

Dermal LD50  $- > 10,000 \text{ mg/m}^3$  (rabbit)

FOR XYLENE: Inhalation LC50 – 5,000 ppm/4hr (rat)

Oral LD50 -4,300 mg/kg (rat)

Dermal LD50 - >1,700 mg/kg (rabbit)

FOR MDI: Inhalation LC50 – 178 mg/m<sup>3</sup> (rat)

Oral LD50 – 2,200 mg/kg (mouse)

FOR ETHYL BENZENE: Oral LD50 – 3,500 mg/kg (rat)

Dermal LD50 – 17,800 μL/kg (rabbit) Inhalation LCLo – 4,000 ppm/4hr (rat)

FOR SILICA, QUARTZ: Implant TDLo – 900 mg/kg (rat)

Inhalation TCLo – 300 μg/m³ (human) Intravenous LDLo – 40 mg/kg (mouse)

### **CHRONIC TOXICITY:**

SKIN: Repeat contact with skin may cause severe irritation, sensitization, or allergic

reaction. Prolonged skin contact with xylene or ethyl benzene may cause skin irritation or dermatitis. Chronic exposure to calcium oxide may cause severe

corrosive damage.

INHALATION: Vapor overexposure may cause drowsiness, irritate eyes, nose, and throat, or

injure blood, liver, or central nervous system. Prolonged inhalation of dust (including calcium carbonate, titanium dioxide, and silica in dust form) may cause

respiratory effects including shortness of breath, reduced pulmonary function, and pulmonary fibrosis (scarring of the lungs). Chronic exposure to BBP by inhalation may cause sleepiness, withdrawal and weight loss or decreased weight gain. Chronic exposure to xylene may cause damage to the eyes, central nervous system, bone marrow, liver, or kidneys. Chronic inhalation of calcium oxide may cause inflammation and ulcers in the respiratory system. Chronic overexposure to isocyanates (found in MDI) may cause lung damage and isocyanate sensitization

(chemical asthma), which may be temporary or permanent. Chronic inhalation of

ethyl benzene may have central nervous effects.

ORAL: Small amounts transferred to the mouth by fingers during use, etc. should not

injure. Swallowing larger quantities may have adverse effects depending on



quantity ingested. Repeated ingestion of BBP may cause sleepiness, withdrawal, and weight loss or decreased weight gain. Ingestion of xylene may cause central nervous system effects.

#### SPECIFIC EFFECTS:

This material contains the following components with the special hazards listed below.

Carcinogens: See below.

Teratogens: Xylene and ethyl benzene may cause teratogenic effects.

Titanium dioxide has caused teratogenic effects in laboratory

animals.

Mutagens: Positive and negative results have been observed "in vitro"

for MDI and ethyl benzene. For ethyl benzene, mutation in mammalian somatic cells (Rodent, mouse) Lymphocyte =

80 mg/L.

Reproductive toxins: BBP, xylene, and ethyl benzene may cause reproductive

effects.

#### CARCINOGENICITY:

BUTYL BENZYL PHTHALATE: The IARC has evaluated this chemical and listed it as Group 3, not classifiable as to its carcinogenicity to humans.

TITANIUM DIOXIDE: The IARC has evaluated this chemical and listed it as Group 3, not classifiable as to its carcinogenicity to humans.

XYLENE: The IARC has evaluated this chemical and listed it as Group 3, not classifiable as to its carcinogenicity to humans.

MDI: The IARC has evaluated this chemical and listed it as Group 3, not classifiable as to its carcinogenicity to humans.

ETHYL BENZENE: The IARC has evaluated this chemical and listed it as Group 2B, possibly

carcinogenic to humans.

SILICA, QUARTZ: The IARC has evaluated this chemical and listed it as Group 1, carcinogenic.

### **SECTION XII – ECOLOGICAL INFORMATION**

### FOR BUTYL BENZYL PTHALATE:

Environmental Fate: Biodegradability is 50 – 100% after 28 days.

Environmental Toxicity: LC50 (Pimephales promelas): 1.5-2.25 mg/L (96hr);

LC50 (Rainbow trout): 1.1 mg/L (96hr); EC50 (Daphnia magna): 1.7 mg/L (48 hr); EC50 (Green algae): 1.5 mg/L (72hr)



#### FOR CALCIUM CARBONATE:

Environmental Fate: This chemical is not expected to have a significant impact when

released into the environment.

Environmental Toxicity: TLm (Mosquito Fish): 240 ppm/24hr; 220 ppm/48hr; 160 ppm/96hr

at 70-73.5 degrees F (21-23 degrees C)

FOR CALCIUM OXIDE:

Environmental Fate: Not available.

Environmental Toxicity: This chemical is expected to be toxic to aquatic life.

TLm (Mosquito Fish): 240 ppm/24hr - toxic

TLm (Sunfish): 100 ppm/3hr – toxic

TLm (Vector snail): 300 ppm/24hr - lethal

FOR TITANIUM DIOXIDE:

Environmental Fate: Not available. Environmental Toxicity: Not available.

FOR XYLENE:

Environmental Fate: When released into the soil, this material may evaporate to a

moderate extent. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material may

biodegrade to a moderate extent. When released into water, this

material may evaporate to a moderate extent. When released into water, this material may biodegrade to a moderate extent. When released into

the air, this material may be moderately degraded by reaction with

photochemically produced hydroxyl radicals. When released into the air, this material is expected to have a half-life of less than 1 day. This material is not expected to significantly bioaccumulate. [Mixed xylenes: octanol / water partition coefficient 3.1 - 3.2; bioconcentration factor = 1.3

(eels).1

Environmental Toxicity: This material is expected to be slightly toxic to aquatic life.

LC50 – Range 10-100 mg/L/96hr (fish)

FOR MDI:

Environmental Fate: Aquatic: Rapidly hydrolyzes to form an insoluble crust.

Terrestrial: Will bind with moist soil. No leaching will occur. Atmospheric: Remains in the vapor phase and is degraded by photochemically produced hydroxyl radicals (half-life is 32 hours).

Will not bioconcentrate or biodegrade.

Environmental Toxicity: This material may be toxic to some types of aquatic life.

LC50 – >500 mg/L/24hr static (Daphnia magna, Limnea Stagnalis, and

Zebra fish).

FOR ETHYL BENZENE:



Environmental Fate: No information available.

Environmental Toxicity: This chemical is expected to be toxic to aquatic life.

Fish: Rainbow Trout: LC50 – 14.0 mg/L/96hr

Static Bioassay Fish: Fathead Minnow: LC50 - 12.1 mg/L/96hr

Flow-through Bioassay Fish: Bluegill/Sunfish: LC50 – 150.0 mg/L/96hr

Static Bioassay, pH 6.5-7.9, 21-23 degrees C,

Water flea: EC50 - 2.1 mg/L/48hr

Static Bioassay Water Flea: EC50 - 75.0 mg/L/48hr

Static Bioassay Shrimp (mysidoposis bahia): LC50 - 87.6 mg/L/96hr

Sheepshead Minnow: LC50 - 275mg/L/96hr

Fathead Minnow: LC50 – 42.3 mg/L/96hr in hard water, 48.5mg/L/96hr in

soft water.

FOR SILICA, QUARTZ:

Environmental Fate: Not available. Environmental Toxicity: Not available.

# **SECTION XIII – DISPOSAL INFORMATION**

**PRODUCT DISPOSAL:** RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a

hazardous waste? No

Federal Hazardous Waste Code: Not Applicable

Characteristic Waste: Ignitable: Not Applicable Corrosive: Not Applicable

Reactive: Not Applicable TCLP: Not Applicable

**WASTE FROM RESIDUES** 

**CONTAMINATED PACKAGING:** Residues of hazardous waste in empty containers should be managed according to 40 CFR 261.7

State or local laws may impose additional regulatory requirements regarding disposal.

### **SECTION XIV – TRANSPORT INFORMATION**

DOT Information (49CFR 172.101)

PROPER SHIPPING NAME: Not Applicable HAZARD CLASS: Not Applicable

UN / NA NUMBER: None

PACKING GROUP: Not Applicable QUANTITY LIMITATIONS: Not Applicable VESSEL STORAGE REQUIREMENTS: Not Applicable

### **SECTION XV – REGULATORY INFORMATION**

### **US FEDERAL REGULATIONS:**



### Occupational Health and Safety Administration (OSHA)

Ingredients listed on National Toxicology Program (NTP) Annual Report on Carcinogens The following ingredients are known to be human carcinogens.

♦ Silica, quartz (Silica, crystalline)
♦ Vinyl chloride
14808-60-7
75-01-4

The following ingredients are reasonably anticipated to be human carcinogens.

Furan 110-00-9
 Propylene oxide 75-56-9
 Acetaldehyde 75-07-0

Ingredients listed on International Agency for Research on Cancer (IARC) Monographs The following ingredient is listed as Group 1.

Group 1 is defined as: The agent (mixture) is carcinogenic to humans.

• Silica, quartz

14808-60-7

♦ Vinyl chloride 75-01-4

The following ingredients are listed as Group 2B.

Group 2B is defined as: The agent is possibly carcinogenic to humans.

Ethyl benzene 100-41-4
 Furan 110-00-9
 Propylene oxide 75-56-9
 Acetaldehyde 75-07-0

The following ingredients are listed as Group 3.

Group 3 is defined as: The agent (mixture or exposure circumstances) is not classifiable as to its carcinogenicity to humans.

•	Butyl benzyl phthalate	85-68-7
•	Polyvinyl chloride (PVC)	9002-86-2
•	Titanium dioxide	13463-67-7
•	Xylene	1330-20-7
•	Diphenylmethane diisocyanate (MDI)	101-68-8

# **Toxic Substance Control Act (TSCA)**

TSCA Status: All chemical substances found in this product comply with the Toxic Substances Control Act inventory reporting requirements.

# Superfund Amendments and Reauthorization Act (SARA) Title III

#### Section 302/304

These sections require emergency planning based on Threshold Planning Quantities (TPQs) and release reporting based on Reportable Quantities (RQs) of "Extremely Hazardous Substances" (EHS) listed in Appendix A of 40 CFR 355.



Chemical	CAS No.	Wt%	RQ (lbs)	TPQ (lbs)
Furan	110-00-9	< 0.0006	100	500
Propylene oxide	75-56-9	< 0.0002	100	10,000

#### - Section 311/312

These sections require Tier I/Tier II - Emergency and hazardous chemical inventory form. Minimum thresholds have been established for Tier One/Tier Two reporting under Title III, Section 312. These thresholds are as follows:

For Extremely Hazardous Substances (EHSs) designated under Section 302 of Title III, the reporting threshold is 500 pounds (or 227 kg.) or the threshold planning quantity (TPQ), whichever is lower. For all other hazardous chemicals for which facilities are required to have or prepare an MSDS, the minimum reporting threshold is 10,000 pounds (or 4,540 kg.).

### Section 312 Hazard Class:

Acute: Yes Chronic: No Fire: No Pressure: No Reactive: No

#### 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:

Chemical	CAS No.	Wt%	Threshold Reporting %

Xylene 1330-20-7 1-5 1.0

# Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

Releases of CERCLA hazardous substances, in quantities equal to or greater than their reportable quantity (RQ), are subject to reporting to the National Response Center under CERCLA. Such releases are also subject to state and local regulations under Section 304 of SARA Title III (EPCRA). This material contains the following components and RQs on the CERCLA hazardous substance list.

Chemical	CAS No.	Wt%	Reportable Quantity (RQ) in pounds
Butyl benzyl phthalate	85-68-7	15-40	100
Xylene	1330-20-7	1-5	100
MDI	101-68-8	0.5-1.5	5,000
Ethyl benzene	100-41-4	0.1-1.0	1,000
Chlorobenzene	108-90-7	< 0.01	100
Vinyl chloride	75-01-4	< 0.002	1
Furan	110-00-9	< 0.0006	100
Propylene oxide	75-56-9	< 0.0002	100



Acetaldehyde 75-07-0 < 0.00005 1,000

### **US STATE REGULATIONS:**

### California

# California Safe Drinking Water and Toxic Enforcement Act – Proposition 65

This product contains the following chemical currently listed under California Proposition 65.

Chemical	CAS No.	Source List Designations
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Vinyl chloride	75-01-4	Cancer
Furan	110-00-9	Cancer
Propylene oxide	75-56-9	Cancer
Acetaldehyde	75-07-0	Cancer

# **Volatile Organic Content (VOC)**

*Wt% g/L lbs/gal* 3.53 45 0.38

This product does comply with the California Air Resources Board maximum for VOCs in a sealant.

Per the California Air Resources Board TITLE 17 Division 3 Chapter 1 Subchapter 8.5 Article 2 §94508, a VOC is a substance with a vapor pressure greater than or equal to 0.1 mmHg at 20°C (68°F), or is a chemical compound with less than or equal to 12 carbon atoms if the vapor pressure is not known, or is a chemical compound with a boiling point less than or equal to 216°C (421°F).

### **State Right-to-Know Regulations**

States within the US that have promulgated State Right-to-Know regulations with chemical listing requirements including the chemicals in this product are provided below.

Chemical	CAS No.	Wt%	States
Butyl benzyl phthalate	85-68-7	15-40	, , , <b>.</b> - , - , - , - , - , - , - , - , - , -
			New Jersey, New York, Pennsylvania
Polyvinyl chloride	9002-86-2	10-30	New Jersey
Precipitated calcium carbonate	471-34-1	5-10	Minnesota
Calcium carbonate	1317-65-3	3-7	Massachusetts, Minnesota,
			Pennsylvania, Washington
Calcium oxide	1305-78-8	1-5	Florida, Massachusetts, Minnesota,
			Pennsylvania, Washington
Titanium dioxide	13463-67-7	1-5	Massachusetts, Minnesota, New Jersey,
			Pennsylvania, Washington
Xylene	1330-20-7	1-5	Delaware, Florida, Massachusetts, Michigan,
•			Minnesota, New Jersey, New York,
			Pennsylvania, Washington



MDI	101-68-8 0.5-1.5	Delaware, Florida, Massachusetts, Minnesota, New Jersey, New York, Pennsylvania, Washington
Ethyl benzene	100-41-4 0.1-1.0	Delaware, Florida, Massachusetts, Minnesota, New Jersey, New York, Pennsylvania, Washington
Silica, quartz	14808-60-7 < 0.1	Florida, Massachusetts, Minnesota, New Jersey, Pennsylvania, Washington
Toluenesulfonyl chloride	98-59-9 < 0.01	Minnesota
Chlorobenzene	108-90-7 < 0.01	Delaware, Florida, Massachusetts, Michigan,
		Minnesota, New Jersey, New York,
		Pennsylvania, Washington
Stannous 2-ethylhexanoate	301-10-0 < 0.003	Massachusetts
Vinyl chloride	75-01-4 < 0.002	Delaware, Florida, Massachusetts, Michigan,
·		Minnesota, New Jersey, New York,
		Pennsylvania, Washington
Furan	110-00-9 < 0.0006	Delaware, Florida, Massachusetts, New
		Jersey, New York, Pennsylvania
Propylene oxide	75-56-9 < 0.0002	2 Delaware, Florida, Massachusetts,
• •		Minnesota, New Jersey, New York,
		Pennsylvania, Washington
Acetaldehyde	75-07-0< 0.0000	5Delaware, Florida, Massachusetts,
·		Minnesota, New Jersey, New York,
		Pennsylvania, Washington

## **INTERNATIONAL:**

#### Canada

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

### **Canadian DSL**

All ingredients in this product are currently listed on the Canadian Domestic Substances List (DSL) except the non-hazardous polyurethane prepolymer and dimorpholine ethane, which are both on the NDSL. (Based upon the concentration of the prepolymer in the formulation, it would require over 128,000 10.1 fl.oz. cartridges of Low VOC 25 to reach the 10,000 kg yearly limit for an NDSL polymer approved under Schedule VI before reporting is required. This is equal to approximately 49 200-Gal batches of Low VOC 25. There is also a cumulative limit of 50,000 kg that can take many years to reach, assuming no one year exceeds the 10,000 kg limit. The dimorpholine ethane is in such small quantities that it would require millions of cartridges to reach the yearly limit.) The substances that are on the DSL would not be considered new for the purposes of the Canadian Environmental Protection Act (CEPA).

#### Note:

The recipient of this product should be aware of the possible existence of additional local regulations, which may be applicable to this product.



**HMIS-III:** Health - 0 = No significant health risk

1 = Irritation or minor reversible injury possible

2 = Temporary or minor injury possible

3 = Major injury possible unless prompt action is taken

4 = Life threatening, major or permanent damage possible

Flammability- 0 = Material will not burn

1 = Material must be preheated before ignition will occur

2 = Material must be exposed to high temperatures before ignition

3 = Material capable of ignition under normal temperatures

4 = Flammable gases or very volatile liquids; may ignite spontaneously

Physical Hazard- 0 = Material is normally stable, even under fire conditions

1 = Material normally stable but may become unstable at high temps 2 = Materials that are unstable and may undergo react at room temp

3 = Materials that may form explosive mixtures with water

4 = Materials that are readily capable of explosive water reaction

**Abbreviations:** 

**ACGIH** American Conference of Government Industrial Hygienists

**CAS** Chemical Abstract Service

**CERCLA** Comprehensive Environmental Response, Compensation & Liability Act

**CFR** Code of Federal Regulations

**CPR** Controlled Products Regulations (Canada)

DOT Department of Transportation
IARC International Agency for Research
MSHA Mine Safety and Health Administration

NIOSH National Institute for Occupational Safety and Health

NTP National Toxicity Program

**OSHA** Occupational Safety and Health Administration

**PEL** Permissible Exposure Limit

**RCRA** Resource Conservation and Recovery Act

**SARA** Superfund Amendments and Reauthorization Act

TLV Threshold Limit Value
TWA Time-weighted Average

WHMIS Workplace Hazardous Material Information System

Revision #07-01, supersedes all previous revisions

Created: 11/30/2006

Last Updated: February 23, 2010

**NOTE:** The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.