



SAFETY DATA SHEET

Issue Date 01-May-2013

Revision Date 29-May-2013

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Polyurethane Sealants

Other Means of Identification

SDS # RD-0122

Product Code 0970, 0971, 0972 Series

Recommended Use of the Chemical and Restrictions on Use

Recommended Use Premium grade, high performance sealants designed for use on Window & Door applications (0970), Masonry & Concrete applications (0972) & Blacktop & Roof applications (0971).

Details of the Supplier of the Safety Data Sheet

Supplier Address

Red Devil, Inc.
4175 Webb Street
Pryor, Oklahoma 74361
www.reddevil.com

Emergency Telephone Number

Company Phone Number 918-825-5744
Fax: 918-825-5761
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious Eye Damage/Eye Irritation	Category 2
Respiratory sensitization	Category 1
Skin sensitization	Category 1
Carcinogenicity	Category 1B

Signal Word

DANGER

Hazard Statements

Harmful if inhaled
Causes serious eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
May cause an allergic skin reaction
May cause cancer

**Appearance** Colored paste**Physical State** Paste**Odor** Solvent like**Precautionary Statements - Prevention**

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Use personal protective equipment as required
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Wash face, hands and any exposed skin thoroughly after handling
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Get medical attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Wash contaminated clothing before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

Causes mild skin irritation

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Non-Haz Ingredients*	Proprietary	<50
Calcium Carbonate	1317-65-3	<30
Titanium dioxide	13463-67-7	<7
Talc	14807-96-6	<7
Stoddard solvent	8052-41-3	<5
Bis(2-propylheptyl) phthalate	53306-54-0	<5
Calcium Oxide	1305-78-8	<1.5
Carbon Black	1333-86-4	0-1.0
Toluene-2,4-diisocyanate	584-84-9	<0.50
Toluene 2,6-diisocyanate	91-08-7	<0.05

* Unlisted ingredients are not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200). (Calcium Carbonate, Titanium Dioxide, Talc, Calcium Oxide) Inhalation of particulates unlikely due to product's physical state. Carbon Black (in series 0971, 0972 only).

4. FIRST AID MEASURES

First Aid Measures

General Advice	Provide this SDS to medical personnel for treatment. First aid personnel should pay attention to their own safety. Remove contaminated clothing.
Eye Contact	If in Eyes: Wash affected eyes for @ least 15 minutes under running water w/ eyelids held open, consult eye specialist.
Skin Contact	If on Skin: Wash thoroughly w/ soap & water. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention.
Inhalation	If Inhaled: If difficulties occur after vapor/aerosol inhaled, remove to fresh air & seek medical attention.
Ingestion	If Swallowed: Rinse mouth & then drink plenty of water. Do not induce vomiting unless advised by Poison Control Center or a physician.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Irritating to eyes, respiratory system & skin. May cause skin sensitivity.
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Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians	Treat according to symptoms (decontamination, vital functions), no known specific antidote.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Foam, Water spray, Dry powder, Carbon dioxide.

Unsuitable Extinguishing Media Water jet.

Specific Hazards Arising from the Chemical

Product is not flammable.

Hazardous Combustion Products Hazards During Fire-fighting: Carbon dioxide, Carbon monoxide, harmful vapors, nitrogen oxides, Fumes/smoke, Carbon black.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Contaminated extinguishing water must be disposed of in accordance w/ all official regulations.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Handling in accordance w/ good building materials hygiene & safety practice.

Environmental Precautions Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and Material for Containment and Cleaning Up

Methods for Containment Prevent further leakage or spillage if safe to do so. Use absorbent material to contain spill.

Methods for Cleaning Up For small or large amounts, sweep/shovel up. Dispose of absorbed material in accordance w/ regulations. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Avoid breathing vapors or mists. Wash face, hands, and any exposed skin thoroughly after handling. Use only in well-ventilated areas. In case of insufficient ventilation, wear suitable respiratory equipment. Contaminated work clothing should not be allowed out of the workplace. Wear appropriate personal protective equipment. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. The relevant fire protection measures should be noted.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Keep container tightly closed and store in a cool, dry and well-ventilated place. Store locked up. Store away from ignition sources and incompatible materials. Protect from direct sunlight. Protect from freezing.

Packaging Materials Keep in original container.

Incompatible Materials Strong acids, strong bases, strong oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
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Calcium Carbonate 1317-65-3	-	TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
Titanium dioxide 13463-77-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Talc 14807-96-6	TWA: 2 mg/m ³ particulate matter containing no asbestos and <1% crystalline silica, respirable fraction	(vacated) TWA: 2 mg/m ³ respirable dust <1% Crystalline silica, containing no Asbestos TWA: 20 mppcf if 1% Quartz or more, use Quartz limit	IDLH: 1000 mg/m ³ TWA: 2 mg/m ³ containing no Asbestos and <1% Quartz respirable dust
Stoddard solvent 8052-41-3	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³	IDLH: 20000 mg/m ³ Ceiling: 1800 mg/m ³ 15 min TWA: 350 mg/m ³
Calcium Oxide 1305-78-8	TWA: 2 mg/m ³	TWA: 5 mg/m ³ (vacated) TWA: 5 mg/m ³ not in effect as a result of reconsideration	IDLH: 25 mg/m ³ TWA: 2 mg/m ³
Carbon Black 1333-86-4	TWA: 3 mg/m ³ inhalable fraction	TWA: 3.5 mg/m ³ (vacated) TWA: 3.5 mg/m ³	IDLH: 1750 mg/m ³ TWA: 3.5 mg/m ³ TWA: 0.1 mg/m ³ Carbon black in presence of Polycyclic aromatic hydrocarbons PAH
Toluene-2,4-diisocyanate 584-84-9	STEL: 0.02 ppm TWA: 0.005 ppm	(vacated) TWA: 0.005 ppm (vacated) TWA: 0.04 mg/m ³ (vacated) STEL: 0.02 ppm (vacated) STEL: 0.15 mg/m ³ Ceiling: 0.02 ppm Ceiling: 0.14 mg/m ³	IDLH: 2.5 ppm
Toluene 2,6-diisocyanate 91-08-7	STEL: 0.02 ppm TWA: 0.005 ppm	-	-

Appropriate Engineering Controls

Engineering Controls

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the SDS. Eye wash fountain should be located in immediate work area.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection

Goggles or safety glasses w/ side shields.

Skin and Body Protection

Chemical resistant protective gloves. Body protection should be based on level of exposure & activity.

Respiratory Protection

Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations

Avoid contact w/ skin, eyes & clothing. No special measures necessary if stored & handled correctly. Handle in accordance w/ good building materials hygiene & safety practice. When using, do not eat, drink or smoke. Hands should be washed before breaks & @ end of work shift. At the end of the shift, skin should be cleaned & skin-care agents applied. Gloves should be inspected regularly & prior to each use – replace if necessary, ie: pinhole leaks.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State
Appearance

Paste
Colored paste

Odor

Solvent like

Color	White (0970), Black (0971), Limestone (0970)	Odor Threshold	Not determined
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<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not applicable	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not applicable	
Flash Point	89 °C / 192 °F	ASTM D3278
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Upper Flammability Limits	6% (V) Information applies to the solvent	
Lower Flammability Limit	1% (V) Information applies to the solvent	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density (Specific Gravity)	Not determined	
Water Solubility	Not soluble	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not applicable	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	
VOC Content	< 3%/wt (< 50 g/L)	
Density	~ 1.20 g/cm ³ @ 20 C	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

Product stable if stored & handled as prescribed.

Conditions to Avoid

See Sec. 7 Handling & Storage.

Incompatible Materials

Strong acids, strong bases, strong oxidizing agents.

Hazardous Decomposition Products

No hazardous decomposition products if stored & handled as prescribed.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Based on experience & information available, no adverse health effects are expected if handled as recommended w/ suitable precautions for designated uses. Product has not been tested. Statements on toxicology have been derived from properties of individual components

Eye Contact

Causes serious eye irritation.

Skin Contact	Causes mild skin irritation.
Inhalation	Harmful if inhaled.
Ingestion	Ingestion may cause irritation to mucous membranes.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
Calcium Oxide 1305-78-8	= 500 mg/kg (Rat)	-	-
Carbon Black 1333-86-4	> 15400 mg/kg (Rat)	> 3 g/kg (Rabbit)	-
Toluene-2,4-diisocyanate 584-84-9	= 5800 mg/kg (Rat)	> 16 mL/kg (Rabbit)	= 14 ppm (Rat) 4 h

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Carcinogenicity May cause cancer. Titanium dioxide is a possible carcinogen when it appears as a respirable dust. Carbon black is a possible carcinogen when it appears as a respirable dust.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7		Group 2B		X
Talc 14807-96-6		Group 3		
Carbon Black 1333-86-4	A3	Group 2B		X
Toluene-2,4-diisocyanate 584-84-9		Group 2B		X
Toluene 2,6-diisocyanate 91-08-7		Group 2B		X

ACGIH (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 IARC components are "not classifiable as human carcinogens"

Reproductive Toxicity Results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity No indications of a developmental toxic/teratogenic effect were seen in animal studies.

Chronic Toxicity Repeated Dose Toxicity: Prolonged exposure may cause chronic effects. Overexposure may cause CNS depression including headache, dizziness, nausea & loss of consciousness.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION**Ecotoxicity**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Acutely harmful for aquatic organisms. May cause long-term adverse effects in aquatic environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Talc 14807-96-6		100: 96 h Brachydanio rerio g/L LC50 semi-static		
Calcium Oxide 1305-78-8		1070: 96 h Cyprinus carpio mg/L LC50 static		
Carbon Black 1333-86-4				5600: 24 h Daphnia magna mg/L EC50

Persistence and Degradability

Biological/Abiological Degradation – Evaluation: Poorly biodegradable. Product unstable in water. The elimination data also refer to products of hydrolysis

Bioaccumulation

Not determined

Mobility

Not determined

Other Adverse Effects

Do not discharge into environment w/o control. Product has not been tested. Statements on Ecotoxicology derived from properties of individual components

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations. Do not discharge into drains/surface waters/ground water.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical Name	California Hazardous Waste Status
Calcium Oxide 1305-78-8	Corrosive

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Not regulated

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION

International Inventories**TSCA**

Listed

Legend:*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory**DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List**EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances**ENCS - Japan Existing and New Chemical Substances**IECSC - China Inventory of Existing Chemical Substances**KECL - Korean Existing and Evaluated Chemical Substances**PICCS - Philippines Inventory of Chemicals and Chemical Substances***US Federal Regulations****CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Toluene-2,4-diisocyanate 584-84-9	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ
Toluene 2,6-diisocyanate 91-08-7	100 lb	100 lb	RQ 100 lb final RQ RQ 45.4 kg final RQ

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	Yes

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Toluene-2,4-diisocyanate - 584-84-9	584-84-9	<0.50	0.1 1.0
Toluene 2,6-diisocyanate - 91-08-7	91-08-7	<0.05	0.1 1.0

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Titanium dioxide - 13463-67-7	Carcinogen
Carbon Black - 1333-86-4	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Calcium Carbonate 1317-65-3	X	X	X
Titanium dioxide 13463-67-7	X	X	X
Talc 14807-96-6	X	X	X
Stoddard solvent 8052-41-3	X	X	X
Calcium Oxide 1305-78-8	X	X	X

Carbon Black 1333-86-4	X	X	X
Toluene-2,4-diisocyanate 584-84-9	X	X	X
Toluene 2,6-diisocyanate 91-08-7	X	X	X

16. OTHER INFORMATION

NFPA**Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

HMIS**Health Hazards****Flammability****Physical Hazards****Personal Protection**

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Not determined

Issue Date

01-May-2013

Revision Date

29-May-2013

Revision Note

New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet