

Material Safety Data Sheet

0970 White, 0971 Black, 0972 Limestone PU Sealant

MSDS No. 0122 Rev. 4

Emergency Phone No.
800-535-5053 - INFOTRAC

SECTION 1 – PRODUCT NAME & MANUFACTURER INFORMATION

PRODUCT NAME	Polyurethane Sealant Series: Window & Door, Masonry & Concrete & Blacktop & Roof		
MANUFACTURER'S NAME & TELEPHONE NUMBER	Red Devil, Inc.	918-825-5744	
STREET ADDRESS	4175 Webb Street		
CITY / STATE / ZIP	Pryor, Oklahoma 74361		

SECTION 2 – COMPOSITION / HAZARDOUS INGREDIENTS

	%	TLV	PEL	UNITS
Calcium Carbonate ** (1317-65-3) (Contains Crystalline Silica @ 0.1 to 1.0% of CaCO ₃ filler) ** (14808-60-7)	10 to 30	10	15	mg/m ³
Methyl Oleate (112-62-9)	5 to 10	UN	UN	UN
Talc ** (14807-96-6)	1 to 5	0.1***	0.3***	mg/m ³
		****	2 ***	mg/m ³
Stoddard Solvent (8052-41-3)	1 to 5	100***	500	ppm
			2900	mg/m ³
Calcium Oxide (1305-78-8)	1 to 5	UN	5	mg/m ³
Toluene-2,4-Diisocyanate (584-84-9)	0.1 to 1.0	0.02	UN	ppm
		0.14		mg/m ³
Carbon Black (1333-86-4) (in 0971 & 0972 only)	0.1 to 1.0		3.5	mg/m ³
Titanium Dioxide ** (13463-67-7) (in 0970 & 0972 only)	0.1 to 1.0	10***	15	mg/m ³
Non-Haz Ingredients *	40 to 50	NE	NE	

*Unlisted ingredients are not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200). **Inhalation of particulates unlikely due to product's physical state. ***TWA.****ACGIH.
Calculated VOC: <3.9% (<50 g/L). CARB Compliance: Yes. Prop 65 Ingredients: Yes (Section 16).

SECTION 3 – HAZARDS IDENTIFICATION

PRIMARY ROUTE(S) OF ENTRY	<input checked="" type="checkbox"/> Skin Contact	<input checked="" type="checkbox"/> Skin Absorption	<input checked="" type="checkbox"/> Eye Contact	<input checked="" type="checkbox"/> Inhalation	<input checked="" type="checkbox"/> Ingestion
EMERGENCY OVERVIEW	White, black or limestone paste. Warning: Poison. Harmful if inhaled. Sensitization can occur in some individuals, leading to asthma-like spasms of the bronchial tubes & difficulty breathing. Individuals w/ a history of respiratory illness, asthmatic conditions, eye damage or TDI sensitization should not be exposed to this product. TDI is included in the NTP Annual Report on carcinogens. Results from a TDI health study indicate that overexposure to a respiratory irritant, resulting in lower respiratory tract symptoms could increase the risks of developing asthma-like reactions from subsequent TDI exposure. Contains material which can cause cancer.				
EFFECTS OF OVEREXPOSURE	<u>Eye Contact</u> : May cause eye irritation. <u>Skin Contact</u> : May irritate skin. May cause drying, cracking, irritation & burns. <u>Inhalation</u> : Vapor harmful if inhaled. Can cause headache, irritation, nausea, drowsiness, stupor, coughing spells & allergic respiratory sensitization. <u>Ingestion</u> : May cause gastrointestinal irritation. Aspiration during swallowing or vomiting may cause lung damage & can be fatal. <u>Chronic Hazards</u> : Reports have associated permanent brain & nervous system damage w/ prolonged & repeated occupational overexposure to solvents. Intentional misuse by deliberately concentrating & inhaling vapors may be harmful or fatal. Fillers are encapsulated & are not expected to be released during normal use.				
CONDITIONS AGGRAVATED BY EXPOSURE	Pre-existing eye, skin, liver & respiratory disorders/allergies, including asthma, bronchitis & emphysema may be aggravated w/ exposure. Allergies, eczema & other skin conditions may be aggravated.				

SECTION 4 – FIRST AID MEASURES

SKIN CONTACT	Wash w/ soap & water for @ least 15 minutes. Get medical attention if symptoms persist. Remove & wash contaminated clothing.
EYE CONTACT	Immediately flush w/ large quantities of water for @ least 15 minutes until irritation subsides. Get medical attention immediately.
INHALATION	Remove to fresh air. Get medical attention immediately.
INGESTION	Do not induce vomiting. Get medical attention immediately.

SECTION 5 – FIRE FIGHTING MEASURES

FLAMMABLE	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
EXTINGUISHING MEDIA	Water Fog, Foam, Carbon Dioxide		
FLASHPOINT (°F) & METHOD	Approximately 101C	UPPER EXPLOSIVE LIMIT (% BY VOLUME)	NE
LOWER EXPLOSIVE LIMIT (% BY VOLUME)	NE	AUTOIGNITION TEMPERATURE (°F)	NE
UNUSUAL FIRE & EXPLOSION HAZARDS	Nitrous gases, fumes/smoke, isocyanates vapor		
SPECIAL FIREFIGHTING PROCEDURES	Firefighters should be equipped w/ self-contained breathing apparatus & turn-out gear.		

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PROCEDURES	Ensure adequate ventilation. Dike spill area. Do not discharge into drains/surface waters/groundwater. Absorb remaining liquid w/ absorbent material & place into appropriate containers.
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SECTION 7 – HANDLING & STORAGE

HANDLING PROCEDURES & EQUIPMENT	Keep out of reach of children & pets. Keep containers closed when not in use. Protect containers from excessive heat & freezing. Protect against inhalation of vapor, ingestion & contact w/ skin & eyes. Precautionary statements also apply to empty containers.
STORAGE REQUIREMENTS	Formation of CO2 & build up of pressure possible. Protect against contamination. Keep container tightly closed & in well-ventilated area. Store @ temperatures between 65F & 105F. Protect against moisture.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

RESPIRATORY	Select positive pressure supplied air respirator; not required under normal use w/ adequate ventilation.
EYEWEAR	Tightly fitting chemical safety goggles; wear face shield if splashing is a possibility.
CLOTHING / GLOVES	Prevent skin contact. Wear chemical resistant protective gloves (Neoprene, Pylox, Viton, Buna N). For body protection, wear saran-coated material.
HYGENIC PRACTICES	Eye wash fountains & safety showers must be accessible. Wash soiled clothing immediately. Wash hands w/ soap & water before breaks & @ end of day.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Paste	ODOR & APPEARANCE	White, black or limestone paste w/ solvent-like odor
SPECIFIC GRAVITY	Approximately 1.40 to 1.60	VAPOR DENSITY (AIR=1)	Heavier than air.
EVAPORATION RATE	Slower than Butyl Acetate	BOILING RANGE (°F)	NE
pH	NA	SOLUBILITY IN WATER	Slightly soluble
VAPOR PRESSURE (MM Hg)	NE	%/WT VOLATILE (TNV)	NE

SECTION 10 – STABILITY AND REACTIVITY

STABILITY	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Stable under normal conditions. Reacts w/ water. Risk of bursting. Reacts w/ alcohols. Reacts w/ acids & alkalies. Reacts w/ amines. Risk of exothermic reaction. Risk of polymerization.
INCOMPATIBILITY	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Water, alcohols, strong bases
CONDITIONS TO AVOID	> 40C, Moisture	
HAZARDOUS POLYMERIZATION/HAZARDOUS DECOMPOSITION PRODUCTS	Hazardous polymerization will not occur under normal conditions. Hazardous decomposition products: TDI, carbon monoxide, hydrogen cyanide, nitrogen oxides, aromatic isocyanates, gases/vapors.	

SECTION 11 – TOXICOLOGICAL INFORMATION / CARCINOGENICITY

ACUTE TOXICITY	<u>Oral</u> : LD50/rat: 5800 mg/kg; slightly toxic. <u>Inhalation</u> : LC50/rat: <= 0.78 mg/l/1 hr; moderately toxic. LC50/rat: 0.1 mg/l/4 hr; moderately toxic. <u>Dermal</u> : LD50/rabbit: > 9400 mg/kg; practically nontoxic. <u>Skin Irritation</u> : Rabbit: (FHSA Guideline)
CHRONIC TOXICITY	General toxicity: The chemical structure does not suggest a mutagenic effect. <u>Info on TDI</u> : Substance was mutagenic in various test systems w/ bacterias & cell cultures; however, these results could not be confirmed in tests w/ mammals.
CARCINOGENICITY	No compound related carcinogenic effects. <u>Info on TDI</u> : A clear indication of an increased risk of cancer in humans, has so far not been shown. In long-term studies, a carcinogenic effect was observed when the substance was given orally to laboratory animals (gavage). Not carcinogenic in laboratory animals after long-term inhalation exposures. <u>Info on Crystalline Silica</u> : IARC has classified this substance as a Group 1 (known human carcinogen.) <u>Info on Carbon Black</u> : IARC has classified this substance as Group 2B (possibly carcinogenic to humans). In long-term animal studies in which the substance was given by inhalation in higher concentrations, a carcinogenic effect was observed. A clear indication of an increased risk of cancer in humans has so far not been shown.
REPRODUCTIVE TOXICITY	No reproductive effects. <u>Info on TDI</u> : Results of animal studies gave no indication of a fertility impairing effect. <u>Developmental Toxicity/Teratogenicity</u> : <u>Info on TDI</u> : No indication of a developmental toxic/teratogenic effect were seen in animal studies. <u>Other Info on Stoddard Solvent</u> : In tests w/ mammals a central nervous system disorder was observed.
DATA WITH POSSIBLE RELEVANCE TO HUMANS	Contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 12 – ECOLOGICAL INFORMATION

AQUATIC TOXICITY & ENVIRONMENTAL	Poorly biodegradable. Product unstable in water. Elimination data also refers to products of hydrolysis. <u>Environmental</u> : Acute & prolonged toxicity to fish: static, zebra fish/LC50 (24 hr): > 500 mg/l. Practically nontoxic. <u>Acute toxicity to aquatic invertebrates</u> : Grass shrimp/LC50 (96 hr): ~ 508 mg/l. Practically nontoxic. Pond snail/LC50 (24hr) > 500 mg/l. Practically nontoxic. <u>Chronic toxicity to aquatic invertebrates</u> : Daphnia magna EC50 (24 hr) ~ 750 mg/l. Practically nontoxic. <u>Other terrestrial non-mammals</u> : OECD Guideline 205 redwinged blackbird/LD50: 100 mg/kg = 100. OECD Guideline 205 European Starling/LD50: > 100 mg/kg = > 100.
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SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL	TDI is listed as a hazardous waste under Section 261.33 (f) of EPA's RCRA regulations & requires a special handling for disposal. Incinerate waste containing TDI in a RCRA-licensed facility. RCRA: U223.
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SECTION 14 – TRANSPORT INFORMATION

SPECIAL SHIPPING INFORMATION	<u>Land transport</u> : USDOT. Not classified as a dangerous good under transport regulations. <u>Sea transport</u> : IMDG. Not classified as a dangerous good under transport regulations. <u>Air transport</u> : IATA/ICAO. Not classified as a dangerous good under transport regulations.
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SECTION 15 – REGULATORY INFORMATION

CERCLA – SARA HAZARD CATEGORY	<u>SARA EPCRA 311/312</u> : Acute, chronic	U.S. STATE REGS	See Section 16.
SARA 313	Toluene-2,4-diisocyanate (584-84-9)	TSCA	Released/listed.
		OSHA Haz Category	IARC 1, 2A or 2B carcinogen. NTP listed carcinogen. Chronic target organ effects reported. OSHA PEL established, ACGIH TLV established

SECTION 16 – OTHER INFORMATION / SPECIAL PRECAUTIONS / LEGEND

<p><u>Prop 65 Ingredients</u>: (Known to State of California to cause cancer) Silica Quartz (14808-60-7) – present @ low levels in Calcium Carbonate Filler, Crystalline Silica. <u>NJ Right-to-Know</u>: (Top 5 Ingredients): Calcium Carbonate (1317-65-3), Methyl Oleate (112-62-9), Talc (14807-96-6), Stoddard Solvent (8052-41-3), Calcium Oxide (1305-78-8). <u>HMIS Ratings</u>: Health: 3, Flammability: 1, Reactivity: 0. Canadian WHMIS Class: Not required. WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. <u>State RTK</u>: Calcium Carbonate: MA, PA. Methyl Oleate: MA, Talc: MA, NJ, PA, Stoddard Solvent: MA, NJ, PA. Calcium Oxide: MA, NJ, PA. Crystalline Silica: MA, NJ, PA. Toluene-2,4-Diisocyanate: MA, NJ, PA. Carbon Black: MA, NJ, PA. Titanium Dioxide: MA, NJ, PA. INTERNATIONAL EMERGENCY NUMBER: 352-323-3500 - INFOTRAC</p> <p>LEGEND: NA – Not Applicable, NE – Not Established, UN – Unavailable, VOC – Volatile Organic Compound, PEL – Permissible Exposure Limit, TLV – Threshold Limit Value, STEL – Short Term Exposure Limit, MSDS – Material Safety Data Sheet, ACGIH – American Conference of Governmental Industrial Hygienists, SARA – Superfund Amendments & Reauthorization Act of 1986, OSHA – Occupational Safety & Health Administration, HMIS – Hazardous Materials Identification System, NTP – National Toxicology Program, CEIL – Ceiling Exposure Limit, CASRN (CAS Number) – Chemical Abstracts Service Registry Number, TSCA – Toxic Substances Control Act, NFPA – National Fire Protection Association. IARC – International Agency for Research on Cancer</p>		
Reviewed By: <u>Larry G. Brandon</u>	<u>VP Technology & General Manager</u>	<u>March 14, 2012</u>
NAME	TITLE	DATE

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