

Material Safety Data Sheet

0896 (White), 0897 (Clear), 0896/50 (Aluminum Gray) HVAC/R 100% Silicone Sealant

MSDS No. 0107 Rev. 1

Emergency Phone No.
(918)825-5744

SECTION 1 – PRODUCT NAME & MANUFACTURER INFORMATION

PRODUCT NAME HVAC/R 100% Silicone Sealant – Clear, White, Aluminum Gray

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
PRODUCT CONSISTS OF:				
Ethyltriacetoxysilane (17689-77-9)	< 6%	NE	NE	
Methyltriacetoxysilane ** (4253-34-3)	< 6%	10	10	ppm
Titanium Dioxide *** (13463-67-7) (In white & colors only)	< 5%	10	15	mg/m3
Silica, amorphous *** (7631-86-9)	< 13	20	20	mg/m3
Hydroxy-terminated Dimethyl Siloxane (70131-67-8)	> 50	10	10	ppm
Polydimethylsiloxane (63148-62-9)	< 10	10	10	ppm
Non-hazardous ingredients*	> 10	NA	NA	
*Unlisted ingredients are not considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200). **Observe limits for acetic acid formed during curing on exposure to water or humid air. ***Inhalation of particulates unlikely due to product's physical state. Calculated VOC: < 1.5%/wt (< 40 g/L). CARB Compliance: Yes. Prop 65 Ingredients: None.				

SECTION 3 – HAZARDS IDENTIFICATION

PRIMARY ROUTE(S) OF ENTRY Skin Contact Skin Absorption Eye Contact Inhalation Ingestion

EMERGENCY OVERVIEW Clear or colored paste. Harmful if swallowed or absorbed through skin. May cause eye & skin irritation. May cause nose, throat & respiratory tract irritation.

EFFECTS OF OVEREXPOSURE Acute: (Eye) – Direct contact may cause moderate irritation. (Skin) – May cause moderate irritation. (Inhalation) – Slight irritation to respiratory passages. (Oral) – No significant effects expected from a single short-term exposure. Prolonged/Repeated Exposure: No known applicable information.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE None known.

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.

INHALATION No first aid should be needed under normal use. Remove to fresh air if needed.

INGESTION Not intended for ingestion. No first aid should be needed. Get medical attention if irritation persists. Treat according to person's condition & specifics of exposure.

SECTION 5 – FIRE FIGHTING MEASURES

FLAMMABLE	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
EXTINGUISHING MEDIA	Carbon Dioxide, Dry Chemical, Foam, Water Spray		
FLASHPOINT (°F) & METHOD	> 212 (Closed Cup)	UPPER EXPLOSIVE LIMIT (% BY VOLUME)	NE
LOWER EXPLOSIVE LIMIT (% BY VOLUME)	NE	AUTOIGNITION TEMPERATURE (°F)	NE
UNUSUAL FIRE & EXPLOSION HAZARDS	None		
SPECIAL FIREFIGHTING PROCEDURES	Wear self-contained breathing apparatus pressure demand (NIOSH approved or equivalent) & full protective gear. Use water spray to cool exposed surfaces. Thermal breakdown of this product during fire or high heat conditions may evolve the following hazardous decomposition products: Silicon dioxide. Carbon oxides & traces of incompletely burned carbon compounds. Formaldehyde.		

SECTION 6 – ACCIDENTAL RELEASE MEASURES

PROCEDURES	Wear proper protective equipment (Section 8). Use absorbent material or scrape up dried material & place in approved container.		
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SECTION 7 – HANDLING & STORAGE

HANDLING PROCEDURES & EQUIPMENT	Keep out of reach of children & pets. Do not take internally. Do not breathe vapors. Use w/ adequate ventilation. Product evolves acetic acid when exposed to water or humid air. Provide ventilation during use to control acetic acid within exposure guidelines or use appropriate respirator. Avoid eye contact. Avoid skin contact.		
STORAGE REQUIREMENTS	Keep container closed & store away from water or moisture. Avoid extreme heat or cold. Store away from oxidizing materials. When heated to temperatures above 300F in presence of air, product may form formaldehyde vapors.		

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION

RESPIRATORY	No respiratory protection should be needed. As Engineering Controls, Local & General Ventilation is recommended. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 10 ppm & ACGIH TLV: TWA 10 ppm, STEL 15 ppm. Use respiratory protection if adequate local exhaust ventilation unavailable. OSHA respirator regulations 29 CFR 1910.134 should be followed, using NIOSH/MSHA approved respirators. <u>Spills</u> : Full face respirator.		
EYEWEAR	Goggles or safety glasses w/ side shields. Avoid eye contact.		
CLOTHING / GLOVES	Nitrile rubber or butyl rubber gloves. Avoid skin contact.		
HYGENIC PRACTICES	Remove & wash contaminated clothing before re-use. Wash hands before breaks & @ end of workday.		

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE	Viscous paste	ODOR & APPEARANCE	Clear or colored paste w/ acetic acid odor
SPECIFIC GRAVITY	Approximately 1.0 to 1.1	VAPOR DENSITY (AIR=1)	NE
EVAPORATION RATE	NE	BOILING RANGE (°F)	NE
pH	NE	SOLUBILITY IN WATER	NE
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.		
INCOMPATIBILITY	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>Materials to Avoid</u> : Water, moisture or humid air can cause hazardous vapors to form (Sec. 8). Oxidizing material can cause a reaction.		
CONDITIONS TO AVOID	None.		
HAZARDOUS POLYMERIZATION/HAZARDOUS DECOMPOSITION PRODUCTS	Hazardous polymerization will not occur under normal conditions. Normal decomposition products, ie: COx, NOx.		

SECTION 11 – TOXICOLOGICAL INFORMATION / CARCINOGENICITY

ACGIH	No known applicable information. This product does not contain carcinogens (@0.1% or greater) as defined by IARC, NTP or OSHA.
OSHA	No known applicable information. See above.
IARC	No known applicable information. See above.
NTP	No known applicable information. See above.
DATA WITH POSSIBLE RELEVANCE TO HUMANS	No known applicable information. See above.

SECTION 12 – ECOLOGICAL INFORMATION

AQUATIC TOXICITY	Complete information is not yet available. <u>Ecotoxicity Classification Criteria:</u> Hazard Parameters (LC50 or EC50) High Medium Low Acute Aquatic Toxicity mg/L <= 1 >1 & <= 100 >100 Acute Terrestrial Toxicity <= 100 >100 & <=2000 >2000 (Table adapted from "Environmental Toxicology & Risk Assessment", ASTM STP 1179, p. 34, 1993) (Table can be used to classify the ecotoxicity of this product when ecotoxicity data is listed above. Please read the other information presented in the section concerning the overall ecological safety of this material.)
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SECTION 13 – DISPOSAL CONSIDERATIONS

WASTE DISPOSAL	Dispose of material in accordance w/ Federal, State & Local regulations.
EPA WASTE CODE IF DISCARDED (40CFR Sec.261)	None. <u>RCRA Hazard Class (40 CFR 261)</u> : Not classified as a hazardous waste. State or local laws may impose additional regulatory requirements regarding disposal.

SECTION 14 – TRANSPORT INFORMATION

SPECIAL SHIPPING INFORMATION	<u>DOT Road Shipment Information (49 CFR 172.101)</u> : Not subject to DOT. <u>Ocean Shipment (IMDG)</u> : Not subject to IMDG code. <u>Air Shipment (IATA)</u> : Not subject to IATA regulations.
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SECTION 15 – REGULATORY INFORMATION

CERCLA – SARA HAZARD CATEGORY	Section 304 CERCLA: None. Section 302 (Extremely Hazardous Substances): None. Section 312 (Hazard Class): Acute: Yes. Chronic: No. Fire: No. Pressure: No. Reactive: No.	U.S. STATE REGS	See Section 16.
SARA 313	None present or none present in regulated quantities.	TSCA	All ingredients either on TSCA Inventory or exempt.

SECTION 16 – OTHER INFORMATION / SPECIAL PRECAUTIONS / LEGEND

Prop 65 Ingredients: (Known to State of California to cause cancer) None. NJ Right-to-Know: (Top 5 Ingredients): Hydroxy-terminated Dimethyl Siloxane (70131-67-8), Silica, amorphous (7631-86-9), Methyltriacetoxysilane (4253-34-3), Ethyltriacetoxysilane (17689-77-9), Polydimethylsiloxane (63148-62-9). Pennsylvania Right-to-Know (Non-Haz @ >3%): Dimethyl siloxane, hydroxy-terminated (70131-67-8) Ingredients Known to State of California to cause birth defects or reproductive harm: None. NFPA Profile: Health: 2, Flammability: 1, Reactivity: 0. Product colors other than white, may contain a small amount of Carbon Black.

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.

Reviewed By: <u>Larry G. Brandon</u>	<u>VP Technology & General Manager</u>	<u>January 26, 2010</u>
NAME	TITLE	DATE

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