

**R & R DISTRIBUTORS
MATERIAL SAFETY DATA SHEET**

100% SILICONE ADHESIVE SEALANT

SECTION I - GENERAL INFORMATION

MANUFACTURER'S NAME: R & R Distributors
ADDRESS: 8550 Production Avenue
San Diego, CA 92121
619-621-9021
PHONE:
PREPARED BY: J. E. THOMPSON DATE: 7/31/98
PROPER SHIPPING NAME (49CFR 172.101): NONE
D.O.T. HAZARD NAME (49CFR 172.101): NONE
D.O.T. ID NUMBER (49CFR 172.101): NONE
D.O.T. HAZARD CLASS (49CFR 172.101): NONE
RCRA HAZARD CLASS (40CFR 261) (IF DISCARDED): NONE
E.P.A. PRIORITY POLLUTANTS: (40CFR 122.53): NONE
NFPA = NATIONAL FIRE PROTECTION ASSOCIATION - 704
HEALTH (NFPA): 1 FLAMMABILITY (NFPA): 1 REACTIVITY (NFPA): 0
CAS NO: MIXTURE
GENERIC DESCRIPTION: SILICONE

SECTION II - HAZARDOUS INGREDIENTS AS DEFINED IN 29 CFR 1910.1200

CAS NO.	INGREDIENT	WT %	EXPOSURE LIMITS
4253-34-3	METHYLTRIACTOXYLANE	2	SEE COMMENT BELOW
17689-77-9	ETHYLTRIACTOXYLANE	2	SEE COMMENT BELOW
7631-86-9	SILICA, AMORPHOUS	10	OSHA PEL: 6 MG/M ³ ACGIH TLV: TWA 10 MG/M ³ TOTAL DUST

COMMENTS: OBSERVE LIMITS FOR ACETIC ACID, FORMED DURING CURING ON EXPOSURE TO WATER OR HUMID AIR. OSHA PEL: TWA 10 PPM. ACGIH TLV: TWA 10 PPM, STEL 15 PPM.

SECTION III - EFFECTS OF OVEREXPOSURE

—EYE:
DIRECT CONTACT IRRITATES SLIGHTLY TO MODERATELY WITH REDNESS AND SWELLING.
SKIN: A SINGLE SHORT EXPOSURE (LESS THAN 24 HOURS) MAY IRRITATE. REPEATED PROLONGED CONTACT (24 TO 48 HOURS) MAY IRRITATE MODERATELY.
INHALATION: VAPOR OVEREXPOSURE MAY IRRITATE EYES, NOSE AND THROAT.
ORAL: SMALL AMOUNTS TRANSFERRED TO THE MOUTH BY FINGERS DURING USE, ETC., SHOULD NOT INJURE. SWALLOWING LARGE AMOUNTS MAY CAUSE DIGESTIVE DISCOMFORT.
COMMENTS: NO INJURY FROM SILICA DUST SHOULD OCCUR DURING REASONABLE USE. IF USE CREATES RESPIRABLE PARTICLES, SOME RESPIRATORY SYSTEM INJURY MAY OCCUR.
CURED SEALANT IS NONHAZARDOUS.
THE ABOVE LISTED POTENTIAL EFFECTS OF OVEREXPOSURE ARE BASED ON ACTUAL DATA, RESULTS OF STUDIES PERFORMED ON SIMILAR COMPOSITIONS, COMPONENT DATA AND/OR EXPERT REVIEW OF THE PRODUCT. OVEREXPOSURE TO ANY CHEMICAL MAY RESULT IN ENHANCEMENT OF PRE-EXISTING ADVERSE MEDICAL CONDITIONS AND ALLERGIC REACTIONS.

SECTION IV - EMERGENCY AND FIRST AID PROCEDURES

EYES: FLUSH WITH WATER FOR 15 MINUTES. GET MEDICAL ATTENTION.
SKIN: WIPE OFF AND FLUSH WITH WATER. GET MEDICAL ATTENTION IF IRRITATION DEVELOPS.
INHALATION: REMOVE TO FRESH AIR. GET MEDICAL ATTENTION IF ILL EFFECTS PERSIST.
ORAL: NO FIRST AID SHOULD BE NEEDED.

SECTION V - FIRE AND EXPLOSION DATA

FLASH POINT (METHOD USED): NOT APPLICABLE
AUTOIGNITION TEMP.: NOT DETERMINED
FLAMMABILITY LIMITS IN AIR (%):

LOWER: NOT DETERMINED
UPPER: NOT DETERMINED

EXTINGUISHING MEDIA:

WATER		WATER FOG	X	CO ₂	X	DRY CHEMICAL	X	FOAM	X	OTHER	
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SPECIAL FIREFIGHTING PROCEDURES: SELF CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING SHOULD BE WORN IN FIGHTING FIRES INVOLVING CHEMICALS.

UNUSUAL FIRE AND EXPLOSION HAZARDS: NONE

COMMENTS: PRODUCT IS CONSIDERED A SOLID FOR DOT PURPOSES AND FLASH POINT IS NOT APPLICABLE.

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SECTION VI - PHYSICAL DATA

BOILING POINT (AT 760 MM HG): NOT APPLICABLE
SPECIFIC GRAVITY (AT 77°F/25°C): 1.03
MELTING POINT: NOT APPLICABLE
SOLUBILITY IN WATER (%): LESS THAN 0.1
% VOLATILE BY WEIGHT: LESS THAN 5
EVAPORATION RATE: NOT APPLICABLE
VAPOR PRESSURE (AT 77°F/25°C): LESS THAN 5MM
VAPOR DENSITY (AIR=1 AT 77°F/25°C): NOT APPLICABLE
ODOR: ACETIC ACID
FREEZE POINT: NOT APPLICABLE
PHYSICAL STATE: SOLID

SECTION VII - REACTIVITY DATA

STABILITY: STABLE
INCOMPATIBILITY (MATERIALS TO AVOID): OXIDIZING MATERIAL CAN CAUSE A REACTION. AIR OR MOISTURE CAUSES CURING AND THE LIBERATION OF ACETIC ACID VAPORS.
CONDITIONS TO AVOID: EXPOSURE TO AIR OR MOISTURE UNTIL READY TO USE.
HAZARDOUS DECOMPOSITION PRODUCTS: SILICON DIOXIDE, CARBON DIOXIDE AND TRACES OF INCOMPLETELY BURNED CARBON PRODUCTS.
HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VIII - SPILL, LEAK, MAINTENANCE, REPAIR AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: REMOVE PRODUCT AND CONTAIN FOR SALVAGE OR DISPOSAL
PROTECTIVE EQUIPMENT:
EYES: USE PROPER PROTECTION - SAFETY GLASSES AS A MINIMUM.
SKIN: WASHING AT MEALTIMES AND END OF SHIFT IS ADEQUATE. REMOVE CLOTHING AND SHOES AS SOON AS PRACTICAL AND CLEAN THOROUGHLY BEFORE REUSE. RUBBER OR PLASTIC GLOVES ARE RECOMMENDED.
INHALATION: USE RESPIRATORY PROTECTION UNLESS LOCAL EXHAUST VENTILATION IS ADEQUATE OR AIR SAMPLING DATA SHOW EXPOSURES ARE WITHIN TLV AND PEL GUIDELINES.
WASTE DISPOSAL METHOD: ALL LOCAL, STATE AND FEDERAL REGULATIONS CONCERNING HEALTH AND POLLUTION SHOULD BE REVIEWED TO DETERMINE APPROVED DISPOSAL PROCEDURES.
D.O.T. (49CFR 171.8) /E.P.A. (40CFR 117) SPILL REPORTING INFORMATION
HAZARDOUS SUBSTANCES: NONE
CONCENTRATION OF HAZARDOUS SUBSTANCE: NOT APPLICABLE
REPORTABLE QUANTITY OF PRODUCT: NOT APPLICABLE
COMMENTS: PRODUCT CONTAINS NO INGREDIENT SUBJECT TO D.O.T. OR E.P.A. CERCLA/SARA ENVIRONMENTAL RELEASE REPORTING REGULATIONS. SEE SECTION XI FOR ADDITIONAL SARA COMPLIANCE INFORMATION.

SECTION IX - ROUTINE HANDLING PRECAUTIONS

PROTECTIVE EQUIPMENT:
EYES: USE PROPER PROTECTION - SAFETY GLASSES AS A MINIMUM
SKIN *: WASHING AT MEALTIMES AND END OF SHIFT IS ADEQUATE. REMOVE CLOTHING AND SHOES AS SOON AS PRACTICAL AND CLEAN THOROUGHLY BEFORE REUSE. RUBBER OR PLASTIC GLOVES ARE RECOMMENDED.
INHALATION: USE RESPIRATORY PROTECTION UNLESS LOCAL EXHAUST VENTILATION IS ADEQUATE OR AIR SAMPLING DATA SHOW EXPOSURES ARE WITHIN TLV AND PEL GUIDELINES.
VENTILATION:
LOCAL EXHAUST: RECOMMENDED
MECHANICAL (GENERAL): RECOMMENDED
SUITABLE RESPIRATOR: ORGANIC VAPOR TYPE.
THESE PRECAUTIONS ARE FOR ROOM TEMPERATURE HANDLING; USE AT ELEVATED TEMPERATURES, OR AEROSOL SPRAY APPLICATIONS MAY REQUIRE ADDED PRECAUTIONS.
* GOOD PRACTICE REQUIRES THAT GROSS AMOUNTS OF ANY CHEMICAL BE REMOVED FROM THE SKIN AS SOON AS PRACTICAL, ESPECIALLY BEFORE EATING OR SMOKING.
COMMENTS: AVOID BREATHING VAPORS AND EYE AND SKIN CONTACT. USE ONLY WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY.

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SECTION X - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE BELOW 90°F/32°C. USE REASONABLE CARE AND CAUTION. KEEP CONTAINER CLOSED WHEN NOT IN USE.

OTHER PRECAUTIONS: PRODUCT FORMS ACETIC ACID WHEN EXPOSED TO WATER OR HUMID AIR. PROVIDE VENTILATION DURING USE TO CONTROL ACETIC ACID EXPOSURE WITHIN 10 PPM (CURRENT TLV) OR USE RESPIRATORY PROTECTION.

COMMENTS: TRACES OF FORMALDEHYDE (CARCINOGEN) MAY FORM IF HEATED IN AIR ABOVE 300°F/149°C. PROVIDE VENTILATION TO CONTROL VAPOR EXPOSURE WITHIN INHALATION GUIDELINES WHEN HANDLING AT ELEVATED TEMPERATURES. REVIEW THE OSHA FORMALDEHYDE REGULATION FOR DETAILED INFORMATION ON SAFE HANDLING REQUIREMENTS.

SECTION XI - COMMENTS

ADDITIONAL SARA REGULATORY COMPLIANCE INFORMATION:

SEC. 312 HAZARD CLASS: IMMEDIATE

SEC. 313 NOTIFICATION: NOT APPLICABLE - EITHER NONE PRESENT OR NONE PRESENT IN REGULATED QUANTITIES.

SUPPLEMENTAL STATE COMPLIANCE INFORMATION:

PENNSYLVANIA:	10%	7631-86-9	SILICA, AMORPHOUS
		70131-67-8	POLYDIMETHYLSILOXANE, HYDROXY TERMINATED
MASSACHUSETTS:	10%	7631-86-9	SILICA, AMORPHOUS
NEW JERSEY:	10%	7631-86-9	SILICA, AMORPHOUS, FUMED, #1655
		4253-34-3	METHYLTRIACETOXYSILANE
		17689-77-9	ETHYLTRIACETOXYSILANE
		70131-67-8	POLYDIMETHYLSILOXANE, HYDROXY TERMINATED
		63148-62-9	POLYDIMETHYLSILOXANE

THESE DATA ARE OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.