

Material Safety Data Sheet

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

IDENTITY (As Used on Label and List)
VACSEAL - HIGH VACUUM LEAK SEALANT

Section I GENERAL DESCRIPTION: SILICONE RESIN SOLUTION

Manufacturer's Name
SPACE ENVIRONMENT LABORATORIES
Address (Number, Street, City, State and ZIP Code)
P.O. BOX 1061
BOULDER, COLORADO 80306
U.S.A.
Emergency Telephone Number: (303) 443-4090

Telephone Number for Information: (303) 443-4090

Date Prepared
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Section 11—Hazardous Ingredients/Identity Information

CAS NO.	INGREDIENT	OSHA PEL	ACGIH TLV	Other Limits Recommended	%
75-09-2	Dichloromethane	500 ppm	50 ppm		25
127-18-4	Perchloroethylene	35 ppm	50 ppm	STEL 200 ppm	10
064742898	Naptha Petroleum	100 ppm	100 ppm		10
000097858	Isobutyl Isobutrate	Not Established			6
108419-34-7	Acetate Ester	Not Established			5
00108883	Toluene	100 ppm	100 ppm	STEL 150 ppm	4
000071432	Benzene (Trace Impurity)	1 ppm	10 ppm	STEL 5 ppm	0.01

Section III—Physical/Chemical Characteristics

Boiling Point
AT 760 mm Hg DICHLOROMETHANE: 40.1°C 104°F
Vapor Pressure (mm Hg) DICHLOROMETHANE: 350mmHg
Vapor Density (AIR - 1)
AT 1 atm DICHLOROMETHANE: 2.90
Specific Gravity (H₂O = 11)
AT 77DEG. F (25 DEG. C): 0.975
Melting Point
NOT APPLICABLE
Evaporation Rate: NOT DETERMINED
Solubility in Water: LESS THAN 0.1%

Appearance and Odor:
CLEAR, COLORLESS LIQUID, TYPICAL MIDLY SWEET ODOR

Section IV—Fire and Explosion Hazard Data

Flash Point (Method Used)
NONE (TCC) DICHLOROMETHANE

Flammable Limits
12-19% (UOL.)@ 100 C

Extinguishing Media
WATER FOG, DRY CHEMICAL, FOAM, CARBON DIOXIDE, OTHER.

Special Fire Fighting Procedures
FIREFIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS DUE TO THERMAL

DECOMPOSITION PRODUCTS AND PROTECTIVE CLOTHING SHOULD BE WORN.

Unusual Fire and Explosion Hazards
VAPORS ARE HEAVIER THAN AIR AND CAN TRAVEL ALONG THE GROUND TO REMOTE AREAS.

Section V - Reactivity Data

Stable: YES

Conditions to Avoid: Not Applicable

Incompatibility (Materials to Avoid): Oxidizing and caustic alkalis can cause a reaction under certain conditions.

Hazardous Decomposition or Byproducts:
Silicon dioxide, carbon dioxide and incompletely burned carbon products.

Hazardous Polymerization will not occur.

Conditions to Avoid: None applicable

Section VI Health Hazard Data

Routes of Entry: Inhalation? Skin? Ingestion?

EYE: Direct contact irritates slightly with redness and swelling.

INHALATION: The degree of injury depends on the duration of exposure. Vapors may injure lungs, blood, liver, kidneys and nervous system.

SKIN: A single relatively short exposure irritates. Repeated prolonged contact irritates seriously. Overexposure may irritate internally.

INGESTION: Small amounts transferred to the mouth by fingers should not injure. Swallowing large amounts may injure seriously.

Carcinogenicity: Not Determined.

Signs and Symptoms of Exposure: Prolonged overexposure may injure lungs, kidneys, liver, blood and nervous systems and aggravate existing eye, skin and respiratory disorders.

Medical Conditions Generally Aggravated by Exposure: Short vapor exposure may cause drowsiness and irritate throat.

Emergency and First Aid Procedures:

SKIN: Wipe off and flush with water.

EYES: Immediately flush with water for 15 minutes.

INHALATION: Remove to fresh air. Get medical attention if symptoms persist.

INGESTION: Get medical attention. Do not induce vomiting. Prevent aspiration of liquid into lungs.

Section VII Precautions For Safe Handling And Use

Steps to Be Taken in Case Material is Released or Spilled: Use absorbant material to collect and contain for salvage or disposal. Remove all sources of ignition and wear protective equipment. Use chemical worker goggles. Use respiratory protection unless local exhaust ventilation is adequate or air sampling data exposures are within TLV and PEL guidelines. Rubber or plastic gloves are recommended. Remove contaminated clothing and shoes as soon as practical and clean before reuse.

Waste Disposal Method: All local, state and federal regulations concerning health and pollution should be reviewed to determine approved disposal procedures.

Precautions to Be Taken in Handling and Storing: Keep container closed and away from heat.

Other Precautions: When processing at elevated temperatures, provide ventilation to control exposures within OSHA and ACGIH limits. Aerosol or spray applications may require added precautions. Evolution rate is highest during the first few hours then subsequently approaches zero.

Section VIII Control Measures

Respiratory Protection: Use respiratory protection unless local exhaust ventilation is adequate.

Ventilation: Local Exhaust is recommended.

Mechanical ventilation is recommended

Organic vapour type ventilation is recommended

A suitable respirator is recommended.

Rubber or plastic gloves are recommended

Use proper eye protection.

Other Protective Clothing or Equipment: Change as soon as practical and clean thoroughly after use.

Work/Hygenic Practices: Good practice requires that gross amounts of any chemical be removed from the skin as soon as practical and before eating or smoking.