

VACSEAL INC.

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Safety Data Sheet

Vacseal® High Vacuum Leak Sealant,
Original Liquid with brush
Last update: 02-25-2016

Section 1: Identification

Chemical Name: Vacseal® High Vacuum Leak Sealant, (Liquid)

Synonyms: None

Chemical family: Silicone resin solution of chlorinated and non-chlorinated organic solvents

Emergencies Phone numbers:

+1-720-271-2719 or
+1-303-647-8160

Product or Trade Name: Vacseal® High Vacuum Leak Sealant, (Liquid)

CAS #'s: 79-01-6; 1330-20-7; 100-41-4;

Chemical Formula: Silicone resin solution of chlorinated and non-chlorinated organic solvents

Emergency Overview

OSHA Hazards

Flammable Liquid, Carcinogen, Irritant, Target Organ Effect, Mutagen, Harmful by skin absorption

Target Organs

Liver, Kidney, Pancreas, Blood, Central nervous system, Heart, Lungs, Eyes, Ears

GHS Classification

Flammable liquid (Category 3)
Acute toxicity, Inhalation (Category 4)
Acute toxicity, Oral (Category 5)
Acute toxicity, Dermal (Category 4)
Skin irritation (Category 2)
Serious eye damage (Category 1)
Germ cell mutagenicity (Category 2)
Carcinogenicity (Category 1B)
Specific organ toxicity – single exposure (Category 2)
Specific organ toxicity – repeated exposure (Category 2)
Acute aquatic toxicity (Category 2)
Chronic aquatic toxicity (category 3)

GHS Precautionary Labeling:



Signal word: Danger

Hazard statement(s):

H226	Flammable liquid & vapor
H303	May be harmful if swallowed.
H312 + H332	Harmful if in contact with skin or inhaled
H315:	Causes skin irritation.
H318:	Causes serious eye damage.
H335:	May cause respiratory irritation.
H336:	May cause drowsiness or dizziness.
H341	Suspected of causing genetic defects.
H350:	May cause cancer.
H371:	May cause damage to organs.
H401:	Toxic to aquatic life.
H41:	Toxic to aquatic life with long lasting effects.

Precautionary statement(s):

P210	Keep away from heat, sparks, open flames, hot surfaces – no smoking.
P233	Keep container cool.
P235	Keep container tightly closed.
P240	Ground/bond container and receiving equipment
P241	Use explosion proof electrical, ventilating, lighting equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P260:	Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.
P273:	Avoid release to the environment.
P280:	Wear protective gloves/ eye protection/ face protection.
P305 + P351 + P338:	IF IN EYES: Rinse continually with water for several minutes.
P308 + P313:	If exposed or concerned: Get medical advice / attention.
P403	Store in a well-ventilated area.

Hazardous Material Information System USA

Health: 2
Fire Hazard: 3
Physical Hazard: 0
Personal Protection: B

NFPA Rating (estimated)

Health: 2
Flammability: 3
Reactivity: 1

Section 2: Composition

CAS #	Ingredient Name	Concentration, %	EINECS#
79-01-6	Trichloroethylene	30-60 %	201-167-4
1330-20-7	Xylene	15-30 %	215-535-7
100-41-4	Ethyl benzene	5 - <15 %	202-849-4
proprietary mixture	Silicone Polymers	15-25%	not available

Section 3: Hazard Identification

Potential health effects (acute and chronic)

Health Hazards: The degree of injury depends on the duration of exposure.

Routes of entry:

Eye: Direct contact irritates slightly with redness and swelling.

Inhalation: Vapors may injure lungs, blood, liver, kidneys and nervous system.

Skin: A single relatively short exposure irritates. Repeated prolonged contact irritates seriously. Over exposure may irritate internally.

Ingestion: Small amounts transferred to the mouth by fingers should not injure. Swallowing large amounts will Cause serious injury.

Signs and symptoms of exposure:

Prolonged over exposure may injure lungs, kidneys, liver, blood, and nervous system and aggravate existing eye, skin and respiratory disorders.

Medical condition aggravated by exposure:

Short vapor exposure may cause drowsiness and irritate throat.

Carcinogenicity:

Not determined

Section 4: First Aid Measures

Emergency and first aid procedures:

Take proper precautions to ensure your own health and safety before attempting to rescue and providing first aid for others. These practices include avoiding all unnecessary exposure and removal of the material from eye, skin and clothing.

Inhalation:

If symptoms are experienced, move victim to fresh air, if symptoms persist, obtain medical attention. Medical assistance should be obtained at once.

Eye contact:

Wash eyes with clean low pressure water for fifteen minutes. Medical assistance should be obtained at once.

Skin contact:

If the polymer should contact the skin, wipe off and wash with plenty of soap and water. If the sealant has dried on the skin clean with Acetone (such as nail polish remover), then wash well with soap and water.

Ingestion:

Get medical attention immediately. Do not induce vomiting.

Section 5: Fire Fighting Measures

Fire Extinguishing Media:

Dry Chemical, water fog, foam, carbon dioxide, other

Special Firefighting Procedure:

Wear self-contained breathing apparatus due to thermal decomposition of 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.

Fire and Explosion Hazard Data

Flash Point: 62°F (16.7°C)

Flammable Limits in Air... Flammable limit in air, % by vol.
(trichloroethylene)

LEL (Lower Explosive Limit): Unknown

UEL (Upper Explosive Limit): Unknown

Section 6: Accidental Release Measures

Personal Precautions:

Avoid skin and eye contact; avoid breathing vapor, mist, dust or fumes. Keep container closed.

Environmental Precautions:

Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Spill Response:

Remove all sources of ignition and wear protective equipment. Use absorbent material to collect and contain for salvage or disposal. Use chemical splash goggles and chemically resistant gloves. Use respiratory protection unless exhaust ventilation is adequate or air sample data exposures are within TLV and PEL guidelines. Remove contaminated clothing and shoes as soon as practical and clean before reuse.

Section 7: Handling and Storage

Handling Precautions:

Use with adequate ventilation. Traces of benzene (carcinogen) may form if heated in air above 149 °C. Provide ventilation to control vapor exposure within inhalation guidelines when handling at elevated temperatures. Avoid skin and eye contact. Avoid breathing vapor. Exercise good industrial hygiene practice. Wash after handling, especially before eating, drinking, or smoking.

Storage Conditions:

Keep container closed and away from heat. Do not store near flame or other source of ignition.

Section 8: Exposure Controls and Personal Protection

Industrial Hygiene Standards:

<u>Ingredients</u>	<u>CAS No.</u>	<u>Exposure Limits</u>
Trichloroethylene	79-01-6	OSHA PEL 100 ppm (TWA) ACGIH TLV 50 ppm (TWA) 100 ppm (STEL)
Xylene	1330-20-7	OSHA PEL 100 ppm (TWA) ACGIH TLV 100 ppm (TWA) 150 ppm (STEL)
Ethylbenzene	100-41-4	OSHA PEL 100 ppm (TWA) ACGIH TLV 100 ppm (TWA) 125 PPM (STEL)

Engineering Controls:

Local ventilation – recommended
General ventilation – recommended

Personal Protective Equipment:

Respiratory:

Use appropriate respiratory (Organic Vapor/Dust/Mist) protection unless adequate local exhaust ventilation is provided or air sampling data show exposure is within exposure guidelines.

Eye:

Use Chemical Splash Goggles.

Skin:

Use protective clothing, Chemical resistant gloves, and long sleeves.

Hygiene Measures:

Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse.

Section 9: Physical and Chemical Properties

Physical Form Liquid

Color Colorless to pale yellow

Odor..... Solvent Odor

Boiling Point.(Trichloroethylene).. > 100°C

Formula Weight..... Not determined

Coeff. of Water/Oil Dist. Not determined

pH (Liquids Only)..... Not determined

% Volatile By Volume..... Not determined

Melting Point..... Not determined

Flash Point..... 62°F (16.7°C) Pensky Martens closed cup

Auto ignition temperature Not determined

Explosive properties No

Oxidizing properties No

Vapor Pressure (Trichloroethylene).at 20°C..... Not determined

Vapor Density/Air is 1... Not determined

Solubility In Water..... Not determined

Specific Gravity (Trichloroethylene) at 25°C (77°F)... (H₂O = 1): 1.010

Evaporation Rate..... (n-butyl acetate = 1): Not determined

Viscosity 105 cSt

Section 10: Stability and Reactivity

Stability: Stable

Reactivity:

Conditions to avoid:	None
Materials to avoid:	Oxidizing material can cause a reaction.
Hazardous Decomposition:	Carbon oxides and traces of incompletely burned carbon compounds.
Hazardous Polymerization:	Does not occur.
Products:	Silicone dioxide, Metal oxides, Formaldehyde.

Section 11: Toxicological Information

Possible health effects: Refer to Section 3

Sensitizing effects: None known.

Mutagenic effects: None known.

Reproductive effects: None known.

Carcinogenic effects: None known.

Other Health Hazard: No known applicable information.

Section 12: Ecological Information

Environmental Fate and Distribution:

Organic solvents may evaporate into the atmosphere, where they degrade. Siloxanes are removed from water by sedimentation or binding to sewage sludge. In soil, siloxanes are degraded.

Environmental Effects:

No adverse effects on aquatic organisms are predicted.

Bio-accumulation: Potential to bio-accumulate.

Fate and effects in Waste Water Treatment Plants:

No adverse effects on bacterial are predicted. The siloxanes in this product do not contribute to the BOD. The organic solvents in the product are poorly biodegradable.

Section 13: Disposal Considerations

Product Disposal: Dispose of in accordance with all federal, state and local regulations.

Package Disposal: Dispose of in accordance with all federal, state and local regulations.

Section 14: Transport Information

Proper Shipping Name: Silicone resin solution

DOT Hazard Class: Flammable Liquid 3

UN/NA ID: UN 1866

Packing Group: II

Labels: Not Regulated

Marine Pollutant: Probably not because of its very low solubility in water of the final cured resin.
Other solvents evaporate quite quickly.

DOT Status: Regulated

Section 15: Regulatory Information

TSCA: All components of this product are listed on the TSCA 8(b) inventory.

If identified components of this product are listed under the TSCA 12(b)

Export Notification Rule, they will be listed below.

TSCA 12(b): none

SARA Title 3

SARA Codes

CAS# 100-41-4 Ethyl benzene: immediate, delayed, fire

Section 311/312:

Acute: yes Chronic: yes

Fire: no

Pressure: no

Reactivity: no

Section 313:

This material contains CAS# 100-41-4, Ethyl benzene, which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

CERCLA Hazardous Substances and their Reportable Quantities:

Component	Reportable Quantity
Ethyl benzene	1000 lb final RQ; 454 kg final RQ

Clean Air Act:

CAS# 79-01-6 is listed as a hazardous air pollutant (HAP).

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

CAS# 79-01-6 is listed as a Hazardous Substance under the CWA.

CAS# 79-01-6 is listed as a Priority Pollutant under the Clean Water Act.

CAS# 79-01-6 is listed as a Toxic Pollutant under the Clean Water Act.

STATE RIGHT TO KNOW LISTS:

CAS# 79-01-6 is listed on CA, NJ, MA, MN, PA

CAS# 1330-20-7 is listed on CA, NJ, MA, MN, PA

CAS# 100-41-4 is listed on CA, NJ, MA, MN, PA

WGK(Water Danger/Protection):

CAS# 79-01-6: 3

CAS# 1330-20-7: 2

CAS# 100-41-4: 1

California Prop. 65:

Proposition 65 requires manufacturers or distributors of consumer products into the State of California to provide a warning statement if the product contains ingredients for which the State has found to cause cancer, birth defects or other reproductive harm. If this product contains an ingredient listed by the State of California to cause cancer or reproductive toxicity, it will be listed below:

79-01-6 Trichloroethylene

100.41.4 Ethyl benzene

California No Significant Risk:

CAS# 79-01-6 is listed.

WHMIS:

CAS# 79-01-6 Trichloroethylene: D1B, D2B

CAS# 1330-20-7 Xylene: N/A

CAS# 100-41-4 Ethyl benzene: B2, D1B, D2B

DSL/NDL LIST:

CAS# 79-01-6 is on the DSL List

CAS# 1330-30-7 is on the DSL List

CAS# 100-41-4 is on the DSL List

Section 16: Other Information

General Disclaimer:

The information provided in this Safety Data Sheet is designed only as guidance for safe handling, use, storage, transportation and disposal. The information relates only to the specific material designated and may not be valid for when used in combination with any other materials or if this product has been re-packaged, renamed or relabeled. 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 or updates.

End of Safety Data Sheet