

VACSEAL INC.

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Safety Data Sheet

Vacseal® Vacseal II, High Vacuum Leak Sealant

Revision Date: 07-15-2016

Section 1: Identification

Chemical Name: **Vacseal® Vacseal II, High Vacuum leak Sealant (Cement)**

Synonyms: None

Chemical family: Silicone resin mixture

Emergencies Phone numbers:

+1-720-271-2719 or

+1-720-688-1939

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

Section 2: Hazards Identification

OSHA Hazards

Flammable Liquid, Irritant to skin and eyes, Target Organ Effect

Target Organ systemic toxicity with repeated exposure: Liver, Kidney, Central nervous system, Auditory system

GHS Classification

Flammable liquid (Category 3)

Eye irritation (Category 2B)

Skin irritation (Category 2)

Reproductive toxicity (Category 2)

Specific target organ systemic
toxicity single exposure (Category3)

Specific organ toxicity – single exposure (Category 3)

Specific organ toxicity – repeated exposure (Category 2)
(Central nervous system, Liver, Kidney, Auditory system)

GHS Precautionary Labeling:



Signal word: Warning

Hazard statement(s):

- | | |
|-------------|---------------------------------------------------------------------------------|
| H226 | Flammable liquid and vapor. |
| H303 | May be harmful if swallowed. |
| H312 + H332 | Harmful if in contact with skin or inhaled |
| H315 | Causes skin irritation. |
| H320 | Causes eye irritation |
| H335 | May cause respiratory irritation. |
| H361 | Suspected of damaging fertility or the unborn child, prolonged exposure. |
| H371 | May cause damage to organs liver or kidney, prolonged exposure. |
| H373 | May cause damage to central system, auditory system through prolonged exposure. |

Precautionary statement(s):

- | | |
|------|----------------------------------------------------------------------|
| P201 | Read instructions before use. |
| P210 | Keep away from heat, sparks, open flames, hot surfaces – no smoking. |
| 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 fume/ gas/ mist/ vapors/ spray. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use in a well-ventilated area. |
| P280 | Wear protective gloves / eye protection / face protection. |

Response:

- | | |
|--------------------|----------------------------------------------------------------------------------------------|
| P305 + P351 + P338 | IF IN EYES: Rinse continually with water for several minutes, Seek medical advice/attention. |
| P304 + P340 + P312 | IF INHALED: Remove person to fresh air, seek medical advice. |
| P308 + P313: | IF CONCERNED: Seek medical advice / attention. |
| P403 | STORE in a well-ventilated area. |
| P501 | DISPOSE of contents in approved waste disposal plant. |

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

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 cause respiratory irritation.

Skin: A single relatively short exposure irritates. Repeated prolonged contact irritates seriously.

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.

Section 3: Information on ingredients

Substance: Mixture

Chemical nature: Silicone mixture

Hazardous ingredients:

- Xylene, CAS# 1330-20-7, concentration $\geq 30\%$ - $< 50\%$
- Ethylbenzene, CAS# 100-41-4, concentration $\geq 10\%$ - $< 20\%$
- Toluene, CAS # 108-88-3, concentration ≥ 0.1 - < 1
- Zinc octoate, CAS # 136-53-8, concentration ≥ 0.1 - < 1

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:

Do not induce vomiting, rinse mouth with water. Get medical attention.

Section 5: Fire Fighting Measures

Fire Extinguishing Media:

Water spray, Dry Chemical, Foam, Carbon dioxide

Special Firefighting Procedure:

Do not use a high volume water jet as it may spread fire.
Flash back possible over considerable distance.
Vapors may form explosive mixtures with air.
Exposure to combustion products may be a hazard to health.
Wear self-contained breathing apparatus and protective clothing.

Unusual Fire and explosion hazards:

Vapors are heavier than air and can travel along the ground.

Hazardous combustion products:

Carbon oxides, Silicon oxides, Formaldehyde

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 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 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 or dispose of.

Section 7: Handling and Storage

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.

Safe Handling:

Handle in accordance with good industrial hygiene and safety practice.
Non-sparking tools should be used.
Take care to minimize release into the environment.

Section 8: Exposure Controls and Personal Protection

Industrial Hygiene Standards with Ingredients:

<u>Ingredients</u>	<u>CAS No.</u>	<u>Exposure Limits</u>
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)
Toluene	108-88-3	OSHA PEL 200 ppm (TWA) ACGIH TLV 20 ppm (TWA) 150 PPM (STEL)

Engineering Controls:

Local ventilation – recommended
General ventilation – recommended

Personal Protective Equipment:

Respiratory:

Use appropriate respirator (OSHA, 29 CFR 1910.134) 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 FormLiquid
ColorColorless to pale yellow
Odor.....Solvent
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
Freezing point.....Not determined
Flash Point.....23°C
Explosive properties.....Not explosive
Initial boiling point.....>100°C
Relative density.....1.010
Viscosity, kinematic.....125 cSt
Auto ignition temperature...Not determined
Oxidizing propertiesNo
Vapor pressure.....Not determined
Solubility in Water.....Not determined
Evaporation Rate.....Not determined

Section 10: Stability and Reactivity

Stability: Stable

Reactivity:

Flammable:	Flammable liquid and vapor.
Materials to Avoid:	Oxidizing material can cause a reaction.
Hazardous Decomposition:	Carbon oxides and traces of incompletely burned carbon compounds.
Hazardous Vapors:	When heated to temperatures above 150 °C product can form Formaldehyde vapor

Section 11: Toxicological Information

Routes of exposure: Inhalation, skin contact, Ingestion, eye contact

Acute toxicity: Not classified based on available information.

Carcinogenic effects: None known.

Other Health Hazard: No known applicable information.

Section 12: Ecological Information

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.

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: Flammable Liquid, N.O.S.
DOT Hazard Class: Flammable Liquid 3
UN number: UN 1993
Packing Group: III
Labels: 3
Marine Pollutant: No
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: yes 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:

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

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:

100.41.4 Ethyl benzene

California No Significant Risk:

CAS# 79-01-6 is listed.

WHMIS:

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

Section 16: Other Information

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