SAFETY DATA SHEET

A CRH COMPANY

MATERIAL NAME: SILICONE REMOVER AND SURFACE PREP
CATALOG NUMBER: SR200
EMERGENCY TELEPHONE NO.: CHEMTREC: 1-800-424-9300 (24 hours)
PRODUCT INFORMATION NO.: (513) 874-6550
DATE ISSUED: DECEMBER 9, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

SUPPLIER'S NAME: C.R. Laurence Co., Inc.
ADDRESS: 2503 E. Vernon Ave Los Angeles, Ca 90058-1826 TEL: (323) 588-1281
GENERAL DESCRIPTION: Methyl Siloxane
PHYSICAL FORM: Liquid
COLOR: Colorless
ODOR: Slight odor
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) PROFILE:
Health: 1 **Flammability:** 3 **INSTABILITY/REACTIVITY:** 0

2. HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS

Acute Effects

Eye: Direct contact may cause mild irritation.

Skin: No significant irritation expected from a single short-term exposure.

Inhalation: Irritates respiratory passages very slightly. Overexposure by inhalation may cause drowsiness, dizziness, confusion or loss of coordination.

Oral: Overexposure by ingestion may cause drowsiness, dizziness, confusion or loss of coordination.

Prolonged/Repeated Exposure Effects

Skin: Repeated or prolonged contact may cause defatting and drying of skin which may result in skin irritation and dermatitis.

Inhalation: No known applicable information.

Oral: No known applicable information.

Signs and Symptoms of Overexposure

No known applicable information.

Medical Conditions Aggravated by Exposure

No known applicable information.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component date and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS Number	Wt %	Component Name
107-46-0	55.0 - 75.0	Hexamethyldisiloxane (HMDS)
107-51-7	30.0 - 50.0	Octamethyltrisiloxane

The above components are hazardous as defined in 29 CFR 1910.1200.

4. FIRST AID MEASURES

Eye:	Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes while holding the eyelid(s) open. Obtain medical attention.
Skin:	Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Quickly and gently blot or brush away excess chemical. Flush with lukewarm gently flowing water for 15 minutes. If irritation persists, repeat flushing. If irritation persists, obtain medical advice.
Inhalation:	Remove from the source of contamination or move to fresh air. If irritation persists, obtain medical advice.
Oral:	Never give anything by mouth if victim is rapidly losing consciousness or convulsing. DO NOT INDUCE VOMITING. Have victim drink 2 to 8 oz. (60 to 240 mL) of water. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Have victim rinse mouth with water again. Immediately obtain medical attention.
Notes to Physician:	Treat according to person's condition and specifics of exposure.

5. FIRE FIGHTING MEASURES

Flash Point:	26.6 °F / -3 °C (Closed Cup)
Autoignition Temperature:	662 °F / 350 °C
Flammability Limits in Air:	Lower Limit: 0.9 % Upper Limit: 13.8 %
Extinguishing Media:	On large fires use AFFF alcohol compatible foam or water spray (fog). On small fires use AFFF alcohol compatible foam, CO2 or water spray (fog). Water can be used to cool fire exposed containers.
Fire Fighting Measures:	Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
Unusual Fire Hazards:	Vapors are heavier than air and may travel to a source of ignition and flash back. Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge. Fire burns more vigorously than would be expected.

6. ACCIDENTAL RELEASE MEASURES

Containment/Clean up:	Remove possible ignition sources. Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protection equipment recommendations described in Sections 5 and 8. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbant. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.
Note:	See Section 8 for Personal Protective Equipment for spills.

7. HANDLING AND STORAGE

Use with adequate ventilation. Avoid eye contact. Avoid skin contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally.

Static electricity will accumulate and may ignite vapors. Prevent a possible fire hazard by bonding and grounding or inert gas purge. Keep container closed and away from heat, sparks, and flame.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits

CAS Number	Component Name	Exposure Limits
107-46-0	Hexamethyldisiloxane (HMDS)	Dow Corning guide: TWA 200 ppm.
107-51-7	Octamethyltrisiloxane	Dow Corning guide: TWA 200 ppm.

Engineering Controls

Local Ventilation: Recommended.
General Ventilation: Recommended.

Personal Protective Equipment for Routine Handling

Eyes: Use proper protection - safety glasses as a minimum.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

Suitable Gloves: Avoid skin contact by implementing good industrial hygiene practices and procedures. Select and use gloves and/or protective clothing to further minimize the potential for skin contact. Consult with your glove and/or personnel protective equipment manufacturer for selection of appropriate compatible materials.

Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.

Suitable Respirator: General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

Personal Protective Equipment for Spills

Eyes: Use full face respirator.

Skin: Wash at mealtime and end of shift. Contaminated clothing and shoes should be removed as soon as practical and thoroughly cleaned before reuse. Chemical protective gloves are recommended.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION (CONTINUED)

Inhalation/Suitable Respirator:	Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MHSA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Precautionary Measures:	Avoid eye contact. Avoid skin contact. Avoid breathing vapor, mist, dust, or fumes. Keep container closed. Do not take internally. Use reasonable care.

NOTE: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM:	**Liquid**
COLOR:	**Colorless**
ODOR:	**Slight odor**
SPECIFIC GRAVITY @23°C:	**0.78**
VISCOSITY:	**0.75 mm2/s**
FREEZING/MELTING POINT:	**Not Determined**
BOILING POINT:	**110°C**
VAPOR PRESSURE @25°C:	**Not Determined**
VAPOR DENSITY:	**Not Determined**
SOLUBILITY IN WATER:	**Not Determined**
pH:	**Not Determined**
VOLATILE CONTENT:	**0g/liter**
FLASH POINT:	**26.6°F / -3°C (Closed Cup)**
AUTOIGNITION TEMPERATURE:	**662°F / 350°C**
FLAMMABILITY LIMITS IN AIR:	**Lower Limit: 0.9% Upper Limit: 13.8%**

10. STABILITY AND REACTIVITY

Chemical Stability:	Stable.
Hazardous Polymerization:	Hazardous polymerization will not occur.
Conditions to Avoid:	None.
Materials to Avoid:	Oxidizing material can cause a reaction.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

11. TOXICOLOGICAL INFORMATION

Component Toxicology Information

This material contains octamethyltrisiloxane (L3). Repeated exposure in rats to L3 resulted in what appears to be

11. TOXICOLOGICAL INFORMATION (CONTINUED)

protoporphyrin accumulation in the liver at dose levels that exceed typical workplace or consumer exposures. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown. Industrial, commercial, or consumer intended uses of products containing L3 do not represent a risk to humans.

A 2-year combined chronic/carcinogenicity study was conducted on HMDS in Fischer 344 rats. A dose related increase in Leydig cell tumors was observed at the end of one year. Nearly 100% of the male rats in the control and treated groups had Leydig cell tumors at the end of 2 years, which is an expected observation in this strain of rat. The early onset of Leydig cell tumors in this study may have little or no relevance to humans. Also at the end of two years there was a dose related increase in kidney tumors in male rats at the two highest exposure concentrations (1,600 and 5,000 ppm). Additional work indicates that the kidney tumors in the male rats are mediated through a-2u-globulin. This is considered a rat-specific mode of action with no relevance to humans. The lack of relevance of these findings from this study to humans supports the use of HMDS in its intended applications.

This material contains hexamethyldisiloxane (HMDS). Repeated exposure in rats to HMDS resulted in what appears to be protoporphyrin accumulation in the liver at dose levels that exceed typical workplace or consumer exposures. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown. Industrial, commercial, or consumer intended uses of products containing HMDS do not represent a risk to humans.

Special Hazard Information on Components

No known applicable information.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Air:	Low molecular weight volatile siloxanes in air are degraded by reaction with hydroxyl radicals, which is the dominant degradation process for most chemicals in the atmosphere.
Water:	Low molecular weight volatile siloxanes have very low water solubility and evaporate to air.
Soil:	Low molecular weight volatile siloxanes in soil are removed by several simultaneously occurring processes including volatilization, hydrolysis, and clay-catalyzed degradation.

Environmental Effects

Toxicity to Water Organisms:	Based on analogy to similar materials this product is expected to exhibit low toxicity to aquatic organisms. This product is volatile and has a very short half life in the aquatic environment and therefore does not present a risk to aquatic organisms.
Toxicity to Soil Organisms:	Due to its volatility, this product is unlikely to be found in the terrestrial compartment.
Bioaccumulation:	Low molecular weight volatile siloxanes bioconcentrate in fish exposed under controlled laboratory conditions that are not representative of conditions found in the environment.

Fate and Effects in Waste Water Treatment Plants

Low molecular weight volatile siloxanes are efficiently removed (>90%) during wastewater treatment with approximately equal amounts going to the atmosphere and the sludge. Low molecular weight volatile siloxanes in treated wastewater effluent will be bound to particulate matter because of very low water solubility.

12. ECOLOGICAL INFORMATION (CONTINUED)

ECOTOXICITY CLASSIFICATION CRITERIA

Hazard Parameters (LC50 or EC50) Acute Aquatic Toxicity (mg/L) Acute Terrestrial Toxicity	High < = 1 < = 100	Medium ➢ 1 and < = 100 ➢ 100 and < = 2000	Low ➢ 100 ➢ 2000

This table is adapted from "Environmental Toxicology and Risk Assessment", ASTM STP 1179, p.34 1993

This 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.

13. DISPOSAL CONSIDERATIONS

RCRA Hazard Class (40 CFR 261)

When a decision is made to discard this material, as received, is it classified as a hazardous waste? Yes

Characteristic Waste:
Ignitable: D001

State or local laws may impose additional regulatory requirements regarding disposal.

14. TRANSPORT INFORMATION

DOT Road Shipment Information (49 CFR 172.101)

Proper Shipping Name: Flammable liquids, n.o.s.

Hazard Technical Name: Hexamethyldisiloxane / Octamethyltrisiloxane

Hazard Class: 3

UN/NA Number: UN 1993

Packing Group: II

Hazard Label(s): Flammable Liquid

Ocean Shipment (IMDG)

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.

Hazard Technical Name: Hexamethyldisiloxane / Octamethyltrisiloxane

Hazard Class: 3

UN/NA Number: UN 1993

Packing Group: II

Hazard Label(s): flammable liquid

Marine Pollutant: Hexamethyldisiloxane

14. TRANSPORT INFORMATION (CONTINUED)

Air Shipment (IATA)

Proper Shipping Name:	Flammable liquid, n.o.s.
Hazard Technical Name:	Hexamethyldisiloxane / Octamethyltrisiloxane
Hazard Class:	3
UN/NA Number:	UN 1993
Packing Group:	II
Hazard Label(s):	Flammable Liquid

15. REGULATORY INFORMATION

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200.

TSCA Status: All chemical substances in this material are included on or exempted from listing on the TSCA Inventory of Chemical Substances.

EPA SARA Title III Chemical Listings

Section 302 Extremely Hazardous Substances (40 CFR 355):
None.

Section 304 CERCLA Hazardous Substances (40 CFR 302):
None.

Section 311/312 Hazard Class (40 CFR 370):

Acute:	Yes
Chronic:	No
Fire:	Yes
Pressure:	No
Reactive:	No

Section 313 Toxic Chemicals (40 CFR 372):
None present or none present in regulated quantities.

Note: Chemicals are listed under the 313 Toxic Chemicals section only if they meet or exceed a reporting threshold.

Supplemental State Compliance Information

California

Warning: This product contains the following chemical(s) listed by the State of California under the Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) as being known to cause cancer, birth defects or other reproductive harm.

None known.

15. REGULATORY INFORMATION (CONTINUED)

New Jersey

CAS Number	Wt %	Component Name
107-46-0	55.0 - 75.0	Hexamethyldisiloxane (HMDS)
107-51-7	30.0 - 50.0	Octamethyltrisiloxane

Pennsylvania

CAS Number	Wt %	Component Name
107-46-0	55.0 - 75.0	Hexamethyldisiloxane (HMDS)
107-51-7	30.0 - 50.0	Octamethyltrisiloxane

16. OTHER INFORMATION

TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS ACCURATE; OBTAINED FROM SOURCES BELIEVED BY VALCO CINCINNATI, INC. TO BE ACCURATE. SINCE THE CONDITIONS AND METHODS OF USE OF OUR PRODUCT ARE BEYOND OUR CONTROL, WE DISCLAIM ANY AND ALL LIABILITY ARISING OUT OF THE IMPROPER USE OF THIS PRODUCT OR THE INFORMATION PROVIDED HERE WITH.