ROGERS CORPORATION

U.S. Format

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	CP-492R_Part_B
Product Number (Optional):	CP-492R_Part_B
Use of Product:	Silicone Compound
HMIS RATING:	H 1 F R 0
Supplier:	Rogers Corporation 1100 Governor Lea Road Bear, DE 19701
Telephone:	001-302-834-2100
Fax:	001-302-834-4021
Email:	msdsinfo@rogerscorporation.com
Emergency Telephone Number:	800-424-9300 (U.S. & Canada) Chemtrec 001-703-527-3887 (International – Call Collect)

2. HAZARDS IDENTIFICATION

Emergency Overview:

GHS Classification: Toxic to Reproduction Category 2

GHS Label Elements:

Pictogram:

Signal Word: Warning

Hazard Statements: Including Precautionary Statements: H361; Suspected of damaging fertility or the unborn child.

Prevention: Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Use personal protective equipment as required.

Response: IF exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Concentration (%)
Ethynyl Cyclohexanol	78-27-3	5 - <10
Octamethylcyclotetrasiloxane	556-67-2	0.1 - <1

The material contains no other hazardous ingredients as defined in OSHA's Hazard Communication Standard 29 CFR 1910.1200.

4. FIRST-AID MEASURES

General Advice:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If Inhaled:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In Case of Skin Contact:	Flush affected area with plenty of soap and water.
In Case of Eye Contact:	Flush eyes with water for at least 15 minutes.
If Swallowed:	If swallowed, do NOT induce vomiting. Give a glass of water. Do not give victim anything to drink if he is unconscious. Get medical attention if any discomfort continues.
Most important symptoms and effects, both acute and delayed:	None known.
Indication of any immediate medical attention and special treatment needed:	No data available.

5. FIRE-FIGHTING MEASURES

Conditions of Flammability:	No data available.
Suitable Extinguishing Media:	Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
Special Protective Equipment for Fire Fighters:	Wear self-contained breathing apparatus for firefighting if necessary.
Hazardous Combustion Products:	In case of fire, carbon monoxide and carbon dioxide may be formed.
Further Information:	Do not allow fire water to penetrate surface or ground water. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Use personal protective equipment. Avoid breathing vapors mists or gas. Ensure adequate ventilation. For personal protection see Section 8.
Environmental Precautions:	Prevent runoff from entering drains, sewers, or streams.
Methods and Materials for Containment and Cleaning Up:	Wipe or scrape up material and place in container for disposal. For disposal see Section 13.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with skin and eyes. Use personal protective equipment recommended in Section 8.

Conditions for Safe Storage: Keep container closed. Keep away from heat, sparks and open flame. Keep out of reach of children. Not for injection into humans.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with Workplace Controls Parameters:

Components	CAS #	Value	Control Parameter
Octamethylcyclotetrasiloxane	556-67-2	5 ppm	TWA

Exposure Controls:

Appropriate Engineering Controls: Eye wash facilities and emergency shower must be available when handling this product. Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

Personal Protective Equipment:

Respiratory Protection: Wear a NIOSH approved air-purifying respirator if exposure levels may be exceeded.

Hand Protection: Chemical resistant gloves.

Eye Protection: Safety glasses with side-shields.

Skin and Body Protection: Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene Measures: Observe good industrial hygiene practices. When using do not eat, drink or smoke. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid contact with skin and eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Form: Solid

Color: Brown

Safety Data:

pH: No data available.

Melting/Freezing Point: No data available.

Boiling Point: No data available.

Flash Point: 93.3°C

Ignition Temperature: No data available.

Autoignition Temperature: No data available.

Lower Explosion Limit: No data available.

Upper Explosion Limit: No data available.

Vapor Pressure: No data available.

Specific Gravity: 1.14

Water Solubility: Insoluble

Partition Coefficient: No data available.

Density Ca. 1.1 g/cm3

Odor: Strong

Odor Threshold: No data available.

Evaporation Rate: No data available.

10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction if used as recommended.

Chemical Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur.
Conditions to Avoid:	None known.
Materials to Avoid:	None known.
Hazardous Decomposition Products:	Carbon dioxide Silicon dioxide. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Oral
Product: No data available.

Specified substance(s):
Ethynyl Cyclohexanol: LD 50 (Rat): 600 mg/kg
Octamethylcyclotetrasiloxane: LD 50 (Rat): > 4,800 mg/kg

Dermal
Product: No data available.

Specified substance(s):
Ethynyl Cyclohexanol: LD 50 (Rabbit): 1,000 mg/kg
Octamethylcyclotetrasiloxane: LD 50 (Rat): > 2,375 mg/kg

Inhalation
Product: No data available.

Specified substance(s):
Octamethylcyclotetrasiloxane: LC50 (Rat): 36 mg/l

Repeated dose toxicity
Product: No data available

Carcinogenicity:	No data available.
Reproductive Toxicity:	No data available.
Teratogenicity:	No data available.
Specific Target Organ Toxicity – Single Exposure (GHS):	No data available.
Specific Target Organ Toxicity – Repeated Exposure (GHS):	No data available.
Aspiration Hazard:	No data available.

Additional Information:

Octamethylcyclotetrasiloxane
Ingestion: Rodents given large doses via oral gavage of octamethylcyclotetrasiloxane (1600 mg/kg day, 14 days) developed liver weights relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appeared normal) as well as hypertrophy (increased cell size).

Inhalation: In inhalation studies, laboratory rodents exposed to octamethylcyclotetrasiloxane (300 ppm five days/week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. Inhalation studies utilizing laboratory rabbits and guinea pigs showed no effects on liver weights. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents.

Range finding reproductive studies were conducted (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation) with octamethylcyclotetrasiloxane (D4). Rats were exposed to 70 and 700 ppm.

In the 700 ppm group, there was a statistically significant reduction in mean litter size and in implantation sites. No D4 related clinical signs were observed in the pups and no exposure related pathological findings were found.

Interim results from a two generation reproductive study in rats exposed to 500 and 700 ppm D4 (whole body inhalation, 70 days prior to mating through mating, gestation and lactation) resulted in a statistically significant decrease in live mean litter size as well as extended period of off-spring delivery (dystocia). These results were not observed at the 70 and 300 ppm dosing levels.

Preliminary results from an ongoing 24-month combined chronic/oncogenicity study in rats exposed to 10, 30, 150 or 700 ppm D4 showed test-article related effects in the kidney (male and female) and uterus of rats exposed for 12 to 24 months. These effects include increased kidney weight and severity of chronic nephropathy, increased uterine weight, increased incidence of endometrial cell hyperplasia, and an increased incidence of enometrial adenomas. All of these effects were limited to the 700 ppm exposure group.

The relevance of this data to humans is unclear. Further studies are ongoing.

In developmental toxicity studies, rats and rabbits were exposed to octamethylcyclotetrasiloxane at concentrations up to 700 ppm and 500 ppm, respectively. No teratogenic effects (birth defects) were observed in either study.

No data available.

12. ECOLOGICAL INFORMATION:

Toxicity: No data available.

Persistence and Degradability: Biodegradation
Product: No data available.

Specified substance(s):
Ethynyl Cyclohexanol: 20 %
Octamethylcyclotetrasiloxane: 3.7 % (29 d, 310 Ready Biodegradability - CO Sealed Vessels (Headspace Test)) Not readily biodegradable.

BOD/COD Ratio
Product: No data available.

Bio-accumulative Potential: Bioconcentration Factor (BCF)
Product: No data available.

Specified substance(s):
Octamethylcyclotetrasiloxane: Fathead Minnow, Bioconcentration Factor (BCF): 12.40

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Mobility in Soil: No data available.

PBT and vPvB Assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other Adverse Effects: No data available.

13. DISPOSAL CONSIDERATIONS

Product:	Consult federal, state, and local regulations to determine appropriate disposal options.
Contaminated Packaging:	Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (U.S.) Classification:	Not classified as hazardous for transportation purposes.
IMDG Classification:	Not classified as hazardous for transportation purposes.
IATA Classification:	Not classified as hazardous for transportation purposes.

15. REGULATORY INFORMATION

Section 302 Components:	No chemicals in this material are subject to the reporting requirements of SARA Title III.
Section 311 / 312 Hazards:	Not Applicable.
CERCLA (Comprehensive Emergency Response, Compensation, and Liability Act:	None present or none present in regulated quantities.
SARA Title III (Superfund Amendments and Reauthorization Act):	None present or none present in regulated quantities.

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372:

CAS #	CHEMICAL NAME	PERCENT BY WEIGHT
-	-	-

16. OTHER INFORMATION

NA = Not Applicable
NE = Not Established
NC = Not Classified

FILE: 99433-CP 492R_Part_B GHS SDS-02062023
PREPARED BY: Corporate EHS
REVIEWED BY: EHS Engineering
DATE: Feb. 6, 2023

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