# GENESEE POLYMERS CORPORATION

# **GP-422**

#### Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Date of Issue: 08/11/2021 Version: 1.0

# **SECTION 1: IDENTIFICATION**

#### 1.1. Product Identifier

**Product Form:** Mixture **Product Name:** GP-422 **Product Code:** C-5700

Synonyms: Silicone Resin Solution1.2. Intended Use of the Product

Industrial / Hydrophobing agent / Water Repellent

# 1.3. Name, Address, and Telephone of the Responsible Party

## Company

**Genesee Polymers Corporation** 

G-4133 S. Dort Hwy. Burton, MI 48529 (810) 715-5018

customerservice@gpcsilicones.com

# 1.4. Emergency Telephone Number

Emergency Number : ChemTel LLC

(800)255-3924 (North America) +1 (813)248-0585 (International)

# **SECTION 2: HAZARDS IDENTIFICATION**

#### 2.1. Classification of the Substance or Mixture

### **GHS-US/CA Classification**

Flam. Liq. 3 H226 Repr. 2 H361 Aquatic Chronic 4 H413

Full text of hazard classes and H-statements: see section 16

## 2.2. Label Elements

**GHS-US/CA Labeling** 

Hazard Pictograms (GHS-US/CA)





Signal Word (GHS-US/CA) : Warning

Hazard Statements (GHS-US/CA) : H226 - Flammable liquid and vapor.

H361 - Suspected of damaging fertility or the unborn child. H413 - May cause long lasting harmful effects to aquatic life.

Precautionary Statements (GHS-US/CA): P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P233 - Keep container tightly closed.

P240 - Ground/bond container and receiving equipment.

P241 - Use explosion-proof electrical, ventilating, and lighting equipment.

P242 - Use only non-sparking tools.

P243 - Take action to prevent static discharges. P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye protection.

P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water.

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P308+P313 - If exposed or concerned: Get medical advice/attention.

P370+P378 - In case of fire: Use appropriate media (see section 5) to extinguish.

P403+P235 - Store in a well-ventilated place. Keep cool.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

#### 2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

### 2.4. Unknown Acute Toxicity (GHS-US/CA)

No data available

# **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Synonyms	Product Identifier	% *	GHS Ingredient
				Classification
Silicic acid, trimethylsilyl ester	Hydrolysis product of trimethylchlorosilane - ethylsilicate and water / (Reaction product of silicic acid, isopropanol, trimethylchlorosilane, hydrochloric acid and water) / Silicate, trimethylsilyl / Polysilicate trimethylsiloxy / trimethylsiloxysilicate (m/q 0.6-0.8)	(CAS-No.) 56275-01-5	75	Not classified
Octamethyl- cyclotetrasiloxane	Cyclotetrasiloxane, octamethyl- / Cyclotetrasiloxane, 2,2,4,4,6,6,8,8-octamethyl- / D4 / 2,2,4,4,6,6,8,8-Octamethylcyclotetrasiloxane / Cyclomethicone 4	(CAS-No.) 556-67-2	25	Flam. Liq. 3, H226 Repr. 2, H361 Aquatic Chronic 4, H413

Full text of H- and EUH-statements: see section 16

### **SECTION 4: FIRST AID MEASURES**

## 4.1. Description of First-aid Measures

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

**Inhalation:** When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Immediately remove contaminated clothing. Rinse skin with water/shower. Wash affected areas with soap and water. If symptoms occur: Seek medical advice.

**Eye Contact:** Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation develops or persists.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

### 4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Suspected of damaging fertility. Suspected of damaging the unborn child.

**Inhalation:** Prolonged exposure may cause irritation.

**Skin Contact:** Prolonged exposure may cause skin irritation.

**Eye Contact:** May cause slight irritation to eyes. **Ingestion:** Ingestion may cause adverse effects.

Chronic Symptoms: Suspected of damaging fertility or the unborn child.

# 4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

#### SECTION 5: FIRE-FIGHTING MEASURES

# 5.1. Extinguishing Media

**Suitable Extinguishing Media:** Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO<sub>2</sub>). Water may be ineffective but water should be used to keep fire-exposed container cool.

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<sup>\*</sup>Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%).

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Unsuitable Extinguishing Media: Do not use a heavy water stream. A heavy water stream may spread burning liquid.

#### 5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Flammable liquid and vapor.

**Explosion Hazard:** May form flammable or explosive vapor-air mixture.

**Reactivity:** Reacts violently with strong oxidizers. Increased risk of fire or explosion.

## 5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Smoke, Oxides of silicon and carbon.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

#### 5.4. Reference to Other Sections

Refer to Section 9 for flammability properties.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

**General Measures:** Do not get in eyes, on skin, or on clothing. Do not breathe vapor, mist or spray. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Use special care to avoid static electric charges.

### 6.1.1. For Non-Emergency Personnel

**Protective Equipment:** Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so.

#### 6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

**Emergency Procedures:** Eliminate ignition sources first, then ventilate the area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

#### 6.2. Environmental Precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

## 6.3. Methods and Materials for Containment and Cleaning Up

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. As an immediate precautionary measure, isolate spill or leak area in all directions.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Transfer spilled material to a suitable container for disposal. Absorb and/or contain spill with inert material. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools. Contact competent authorities after a large spill.

## 6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

### **SECTION 7: HANDLING AND STORAGE**

# 7.1. Precautions for Safe Handling

Additional Hazards When Processed: Handle empty containers with care because residual vapors are flammable.

**Precautions for Safe Handling:** Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes, on skin, or on clothing. Do NOT breathe (dust, vapor, mist, gas). Take precautionary measures against static discharge. Use only non-sparking tools.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

# 7.2. Conditions for Safe Storage, Including Any Incompatibilities

**Technical Measures:** Comply with applicable regulations. Take action to prevent static discharges. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating, and lighting equipment.

**Storage Conditions:** Store in a dry, cool place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. Store in a well-ventilated place. Keep container tightly closed. Keep in fireproof place.

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

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# 7.3. Specific End Use(s)

Industrial / Hydrophobing agent / Water Repellent

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), or Canadian provincial governments.

Octamethylcyclotetrasiloxane (556-67-2)		
USA AIHA	WEEL TWA [ppm]	10 ppm

#### 8.2. Exposure Controls

**Appropriate Engineering Controls:** Suitable eye/body wash equipment should be available in the vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Ensure all national/local regulations are observed. Gas detectors should be used when flammable gases or vapors may be released. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment.

**Personal Protective Equipment:** Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection. Face shield.











Materials for Protective Clothing: Chemically resistant materials and fabrics. Wear fire/flame resistant/retardant clothing.

Hand Protection: Wear protective gloves.

**Eye and Face Protection:** Chemical safety goggles and face shield. **Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

**Thermal Hazard Protection:** Wear fire/flame resistant/retardant clothing. **Environmental Exposure Controls:** Avoid release to the environment.

Consumer Exposure Controls: Wear recommended personal protective equipment.

Other Information: When using, do not eat, drink or smoke.

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

#### 9.1. Information on Basic Physical and Chemical Properties

Physical State : Liquid

Appearance : Clear, colorless to very light straw liquid.

Odor Threshold : No data available.

No data available

**pH** : 7.0

Not available **Evaporation Rate Melting Point** Not available **Freezing Point** Not available **Boiling Point** 175 °C (347 °F) **Flash Point** 31 °C (87.8 °F) **Auto-ignition Temperature** Not available **Decomposition Temperature** Not available Flammability (solid, gas) Not applicable

Lower Flammable Limit: 0.4 %Upper Flammable Limit: 19 %Vapor Pressure: < 1.32 hPa</th>Relative Vapor Density at 20°C: Not available

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Relative Density : 1.07

 Specific Gravity
 : Not available

 Solubility
 : Insoluble in water.

 Partition Coefficient: N-Octanol/Water
 : Not available

 Viscosity
 : 1 – 100 cP

# **SECTION 10: STABILITY AND REACTIVITY**

- **10.1. Reactivity:** Reacts violently with strong oxidizers. Increased risk of fire or explosion.
- 10.2. Chemical Stability: Flammable liquid and vapor. May form flammable or explosive vapor-air mixture.
- 10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- **10.4. Conditions to Avoid:** Direct sunlight, extremely high or low temperatures, heat, hot surfaces, sparks, open flames, incompatible materials, and other ignition sources.
- **10.5. Incompatible Materials:** Strong acids, strong bases, strong oxidizers.
- **10.6.** Hazardous Decomposition Products: Thermal decomposition may produce: Smoke, Oxides of silicon and carbon.

# **SECTION 11: TOXICOLOGICAL INFORMATION**

# 11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (Dermal): Not classified (Based on available data, the classification criteria are not met)
Acute Toxicity (Inhalation): Not classified (Based on available data, the classification criteria are not met)

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified (Based on available data, the classification criteria are not met)

**pH:** 7.0

Eye Damage/Irritation: Not classified (Based on available data, the classification criteria are not met)

**pH:** 7.0

Respiratory or Skin Sensitization: Not classified (Based on available data, the classification criteria are not met)

Germ Cell Mutagenicity: Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity: Not classified (Based on available data, the classification criteria are not met)

Specific Target Organ Toxicity (Repeated Exposure): Not classified (Based on available data, the classification criteria are not met)

**Reproductive Toxicity:** Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure): Not classified (Based on available data, the classification criteria are not met)

Aspiration Hazard: Not classified (Based on available data, the classification criteria are not met)

Symptoms/Injuries After Inhalation: Prolonged exposure may cause irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

Symptoms/Injuries After Eye Contact: May cause slight irritation to eyes. Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects. Chronic Symptoms: Suspected of damaging fertility or the unborn child.

# 11.2. Information on Toxicological Effects - Ingredient(s)

# LD50 and LC50 Data:

Octamethylcyclotetrasiloxane (556-67-2)	
LD50 Oral Rat	> 4800 mg/kg (No mortality)
LD50 Dermal Rat	> 2375 mg/kg
LD50 Dermal Rabbit	> 2.5 ml/kg (No mortality)
LC50 Inhalation Rat	36 mg/l/4h

### **SECTION 12: ECOLOGICAL INFORMATION**

### 12.1. Toxicity

**Ecology - General:** May cause long lasting harmful effects to aquatic life.

Octamethylcyclotetrasiloxane (556-67-2)	
LC50 Fish 1	> 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
LC50 Fish 2	> 1000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

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#### 12.2. **Persistence and Degradability**

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Persistence and Degradability	May cause long-term adverse effects in the environment.

#### 12.3. **Bioaccumulative Potential**

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Bioaccumulative Potential	Not established.
Octamethylcyclotetrasiloxane (556-67-2)	
BCF Fish 1	12400
Partition coefficient n-octanol/water	5.1
(Log Pow)	

#### **Mobility in Soil** 12.4.

GP-422	
Ecology - Soil	Adsorbs into the soil.

#### 12.5. Other Adverse Effects

Other Adverse Effects: None known.

Other Information: Avoid release to the environment.

# **SECTION 13: DISPOSAL CONSIDERATIONS**

#### 13.1. Waste treatment methods

Waste Treatment Methods: Incineration is the preferred method for disposal of waste product.

Sewage Disposal Recommendations: Do not dispose of waste into sewer.

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable.

Ecology - Waste Materials: Avoid release to the environment. This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

# **SECTION 14: TRANSPORT INFORMATION**

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

#### 14.1. In Accordance with DOT

**Proper Shipping Name** : FLAMMABLE LIQUIDS, N.O.S. (OCTAMETHYLCYCLOTETRASILOXANE MIXTURE)

**Hazard Class** : 3 **Identification Number** : UN1993

**Label Codes** : 3 **Packing Group** : 111 **ERG Number** : 128



#### 14.2. In Accordance with IMDG

**Proper Shipping Name** : FLAMMABLE LIQUID, N.O.S.(OCTAMETHYLCYCLOTETRASILOXANE MIXTURE)

**Hazard Class** : 3

**Identification Number** : UN1993

**Label Codes** : 3 **Packing Group** : 111 EmS-No. (Fire) : F-E EmS-No. (Spillage) : S-E



#### In Accordance with IATA 14.3.

**Proper Shipping Name** : FLAMMABLE LIQUID, N.O.S. (OCTAMETHYLCYCLOTETRASILOXANE MIXTURE)

**Hazard Class** : 3

**Identification Number** : UN1993 **Label Codes** : 3

**Packing Group** : 111 **ERG Code (IATA)** : 3L



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#### 14.4. In Accordance with TDG

Proper Shipping Name : FLAMMABLE LIQUID, N.O.S. (OCTAMETHYLCYCLOTETRASILOXANE MIXTURE)

Hazard Class : 3

Identification Number : UN1993

Label Codes : 3
Packing Group : III



### SECTION 15: REGULATORY INFORMATION

# 15.1. US Federal Regulations

GP-422	
SARA Section 311/312 Hazard Classes	Health hazard - Reproductive toxicity
	Physical hazard - Flammable (gases, aerosols, liquids, or solids)
Octamethylcyclotetrasiloxane (556-67-2)	
Listed on the United States TSCA (Toxic Substances	Control Act) inventory
<b>EPA TSCA Regulatory Flag</b>	T - T - indicates a substance that is the subject of a final TSCA
	section 4 test rule.
Silicic acid, trimethylsilyl ester (56275-01-5)	
Listed on the United States TSCA (Toxic Substances	Control Act) inventory

#### 15.2. US State Regulations

Neither this product nor its chemical components appear on any US state lists, or its chemical components are not required to be disclosed

# 15.3. Canadian Regulations

### Octamethylcyclotetrasiloxane (556-67-2)

Listed on the Canadian DSL (Domestic Substances List)

# Silicic acid, trimethylsilyl ester (56275-01-5)

Listed on the Canadian NDSL (Non-Domestic Substances List)

#### 15.4. Inventory Listings

# Octamethylcyclotetrasiloxane (556-67-2)

Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the Japanese ISHL (Industrial Safety and Health Law)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

## Silicic acid, trimethylsilyl ester (56275-01-5)

Listed introduction on Australian Industrial Chemicals Introduction Scheme (AICIS Inventory)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on KECL/KECI (Korean Existing Chemicals Inventory)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on the TCSI (Taiwan Chemical Substance Inventory)

# SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest : 08/11/2021

Revision

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#### Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products Regulations (HPR) SOR/2015-17.

#### **GHS Full Text Phrases:**

Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Flam. Liq. 3	Flammable liquids Category 3
Repr. 2	Reproductive toxicity Category 2
H226	Flammable liquid and vapor
H361	Suspected of damaging fertility or the unborn child
H413	May cause long lasting harmful effects to aquatic life

NFPA Health Hazard : 3 - Materials that, under emergency conditions, can cause

serious or permanent injury.

NFPA Fire Hazard : 3 - Liquids and solids (including finely divided suspended

solids) that can be ignited under almost all ambient

temperature conditions.

NFPA Reactivity Hazard : 1 - Materials that in themselves are normally stable but

can become unstable at elevated temperatures and

pressures.

**HMIS III Rating** 

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment

is given

\* Chronic - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 3 Serious Hazard
Physical : 1 Slight Hazard

Personal protection : D

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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