

# Safety Data Sheet

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## 1 – PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product Identifiers

**PRODUCT NAME:** GP-193  
**PRODUCT NUMBER:** C-2417-BULK  
**DESCRIPTION:** HEXAMETHYLDISILAZANE  
**CAS NUMBER:** 999-97-3  
**EC NUMBER:** 213-668-5

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

**USE OF SUBSTANCE:** Industrial / Chemical for synthesis

### 1.3 Company Identifiers

**MANUFACTURER:** Genesee Polymers Corporation  
G-4099 S. Dort Hwy.  
Burton, MI 48529  
Tel (810) 715-5018 Fax (810) 742-8581  
Email: [cpiskoti@gpsilicones.com](mailto:cpiskoti@gpsilicones.com)

### 1.4 Emergency Contact Information

**24 HR. EMERGENCY PHONES:** CHEM\*TEL (800) 255-3924 (Domestic) / (813) 248-0585 (International)  
**Contract Number: MIS0002539**

## 2 – HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008**

Classifications listed also are applicable to the OSHA GHS Hazard Communication Standard (29CFR1910.1200).

Flam. Liq. 2 H225 Highly flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

Acute Tox. 3 H301 Toxic if swallowed.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H335 May cause respiratory irritation.

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC**

Not Applicable

**Information concerning particular hazards for human and environment:**

Genesee Polymers - GP-193

PAGE 1 of 11

Not Applicable

**Additional Information:**

There are no other hazards not otherwise classified that have been identified.

0 percent of the mixture consists of component(s) of unknown toxicity.

**2.2 GHS Label elements, including precautionary statements**

**Labelling according to Regulation (EC) No 1272/2008**

The product is additionally classified and labelled according to the Globally Harmonized System within the United States. (GHS)

The substance is classified and labelled according to the CLP regulation.

**PICTOGRAMS:**



**SIGNAL WORD:**

Danger

**HAZARD DETERMINING COMPONENTS OF LABELLING:**

1,1,1,3,3,3-hexamethyldisilazane

**HAZARD STATEMENTS**

H225: Highly flammable liquid and vapour.

H301 Toxic if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335 May cause respiratory irritation.

**PRECAUTIONARY STATEMENTS**

P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking.

P280: Wear protective gloves/protective clothing/eye protection.

P302+P352 IF ON SKIN: wash with plenty of water.

P264: Wash thoroughly after handling.

P370+P378: In case of fire: Use foam, powder or carbon dioxide for extinction.

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

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

P362+P364 Take off contaminated clothing and wash it before reuse.

P270 Do not eat, drink or smoke when using this product.

P233 Keep container tightly closed.

P330 Rinse mouth.

P312 Call a POISON CENTER/doctor if you feel unwell.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do.

Continue rinsing.

P261 Avoid breathing mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**HAZARD DESCRIPTION:**

**WHMIS-SYMBOLS:**

Not applicable.

**NFPA-ratings (scale 0 – 4)**

Genesee Polymers - GP-193

Health	2
Flammability	3
Reactivity	0

#### HMIS-ratings (scale 0 – 4)

Health	2
Flammability	3
Reactivity	0
Personal Protection	H

#### HMIS LONG TERM HEALTH SUBSTANCES

None of the ingredients are listed.

#### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Results of PBT and vPvB assessment:

PBT: Not applicable

vPvB: Not applicable

### 3 – HAZARDS IDENTIFICATION

#### 3.1 Substances

**Description:** 1,1,1,3,3,3-hexamethyldisilazane  
**CAS-No.:** 999-97-3  
**EC-No.:** 213-668-5

#### Hazardous components:

COMPONENT	CLASSIFICATION	CONCENTRATION
None	N/A	N/A

### 4 – FIRST-AID MEASURES

#### 4.1 Description of first aid measures

**GENERAL INFORMATION:** Immediately remove any clothing soiled by the product. Take affected persons out into fresh air. Remove breathing equipment only after contaminated clothing have been completely removed.

**BREATHING (INHALATION):** Supply fresh air; consult doctor in case of complaints. In case of irregular breathing or respiratory arrest provide artificial respiration. Provide oxygen treatment if affected person has difficulty breathing. Do not use mouth to mouth or mouth to nose resuscitation. Use a respiratory bag or breathing device. In case of unconsciousness place patient stably in side position for transportation.

**SKIN (DERMAL):** Immediately wash with soap and water and rinse thoroughly. If skin irritation continues, consult a doctor. Seek immediate medical help for blistering or opened wounds.

**EYES:** Remove contact lenses if worn. Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor. Protect unharmed eye.

**SWALLOWING (INGESTION):** Rinse out mouth and then drink plenty of water. Do not induce vomiting; call for medical help immediately.

#### 4.2 Most important symptoms and effects, both acute and delayed

Unconsciousness  
Coughing.  
Diarrhea.  
Headache.  
Gastric or intestinal disorders when ingested.  
Nausea in case of ingestion.  
Dizziness  
Difficulty breathing  
Vomiting.  
Strong caustic effect on skin and mucous membranes.  
Strong irritant with the danger of severe eye injury.  
**HAZARDS:** Causes severe skin burns and eye damage.  
Toxic if swallowed.  
May cause respiratory irritation.  
Danger of gastric perforation.  
Danger of impaired breathing.

#### **4.3 Indication of any immediate medical attention and special treatment needed**

Medical supervision for at least 48 hours.  
If necessary oxygen respiration treatment.  
Later observation for pneumonia and pulmonary oedema.  
If medical advice is needed, have product container or label at hand.

## **5 – FIRE-FIGHTING MEASURES**

### **5.1 Extinguishing media**

#### **Suitable extinguishing agents:**

Fire-extinguishing powder.  
Carbon dioxide.  
Gaseous extinguishing agents.  
Foam.  
Water haze or fog.

**For safety reasons unsuitable extinguishing agents:** Water with full jet. Water spray

#### **5.2 Special hazards arising from the substance or mixture:**

Formation of toxic gases is possible during heating or in case of fire.

#### **5.3 Advice for firefighters**

##### **Protective equipment:**

Wear self-contained respiratory protective device.  
Wear fully protective suit.  
Do not inhale explosion gases or combustion gases.

##### **Additional information**

Eliminate all ignition sources if safe to do so.  
Cool endangered receptacles with water fog or haze.

## **6 – ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Use respiratory protective device against the effects of fumes/dust/aerosol.  
Ensure adequate ventilation.  
Keep away from ignition sources.  
Protect from heat.  
Use personal protective equipment as required.

#### **6.2 Environmental precautions:**

Do not allow to enter sewers/surface or ground water.  
Inform respective authorities in case of seepage into water course or sewage system.

Prevent from spreading (e.g. by damming-in or oil barriers.)

Do not allow to penetrate the ground/soil.

### 6.3 Methods and material for containment and clean up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders.)

Dispose contaminated material as waste according to item 13.

Send for recovery or disposal in suitable receptacles.

Remove from the water surface (e.g. skim or suck off).

### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment

See Section 13 for disposal information.

## 7 – HANDLING and STORAGE

### 7.1 Precautions for safe handling

Use only in well ventilated areas.

Avoid splashes or spray in enclosed areas.

Prevent formation of aerosols.

#### Information about fire – and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Do not spray onto a naked flame or any incandescent material.

Flammable gas-air mixtures may form in empty receptacles.

Fumes can combine with air to form an explosive mixture.

Keep respiratory protective device available.

Highly flammable liquid and vapour.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage:

##### Requirements to be met by storerooms and receptacles:

Provide ventilation for receptacles.

Avoid storage near extreme heat, ignition sources or open flame.

##### Information about storage in one common storage facility:

Store away from foodstuffs.

Store away from oxidizing agents.

Do not store together with acids.

Protect from humidity and water.

##### Further information about storage conditions:

Keep container tightly sealed.

### 7.3 Specific end use(s)

No further relevant information available.

## 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

**Additional information about design of technical facilities:** No further data; see item 7

### 8.1 Control parameters

#### Ingredients with limit values that require monitoring at the workplace:

Ingredient	CAS number	Data type	Value
None	N/A	N/A	N/A

**DNELs** No further relevant information available.

**PNECs** No further relevant information available.

## Ingredients with biological limit value

Ingredient	CAS number	Data type	Value
None	N/A	N/A	N/A

**Additional information:** The lists valid during the making were used as basis.

### 8.2 Exposure controls

#### Personal protective equipment:

##### General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Store protective clothing separately.

##### Respiratory protection:

Use suitable respiratory protective device in case of insufficient ventilation.

For large spills, respiratory protection may be advisable.

##### Protection of hands:



#### Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

##### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

##### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

##### Eye protection:



#### Safety glasses

##### Body protection:

Protective work clothing

##### Limitation and supervision of exposure into the environment

Avoid release to the environment.

##### Risk management measures

See section 7 for additional information.

## 9 – PHYSICAL / CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### General Information

##### Appearance:

**Form:** Liquid.

**Colour:** Colourless

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<b>Odour:</b>	Amine-like
<b>Odour threshold:</b>	Not determined.
<b>pH value:</b>	Not determined.
<b>Change in condition:</b>	
<b>Melting point/Melting range:</b>	-82 °C (-116 °F)
<b>Boiling point/Boiling range:</b>	126 °C (259 °F)
<b>Flash point:</b>	11 °C (52 °F)
<b>Flammability (solid, gaseous):</b>	Not applicable.
<b>Auto/Self-ignition temperature:</b>	330 °C (626 °F)
<b>Decomposition temperature:</b>	Not determined.
<b>Self-igniting:</b>	Product is not self-igniting.
<b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
<b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
<b>Vapor pressure:</b>	1.3 kPa
<b>Density at 25 °C:</b>	0.77 g/cm <sup>3</sup> (6.426 lbs/gal)
<b>Relative density:</b>	Not determined.
<b>Vapour density at 20 °C</b>	5.5 g/cm (45,898 lbs/gal)
<b>Evaporation rate:</b>	Not determined.
<b>Solubility in / Miscibility with Water:</b>	Slowly reacts with water.
<b>Partition coefficient (n-octanol/water)</b>	2.62 log POW
<b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
<b>9.2 Other information</b>	No further relevant information available.

## 10 – STABILITY and REACTIVITY

### 10.1 Reactivity

#### 10.2 Chemical stability

##### Thermal decomposition / conditions to be avoided

Stable under normal temperatures and pressures.

No decomposition if used and stored according to specifications.

#### 10.3 Possibility of hazardous reactions

Reacts with water and acids

Used empty containers may contain product gases which form explosive mixtures with air.

Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.

Reacts with strong alkali.

Reacts with halogenated compounds.

Highly flammable liquid and vapour.

Reacts with oxidizing agents.

Reacts with various metals.

#### 10.4 Conditions to avoid

Keep ignition sources away - Do not smoke.

Store away from oxidizing agents.

Avoid acids.

Moisture

#### 10.5 Incompatible materials:

Oxidizers, strong bases, strong acids

Water

**10.6 Hazardous decomposition products:**

Carbon monoxide and carbon dioxide.  
 Nitrogen oxides (NOx)  
 Ammonia  
 Hexamethyldisiloxane

<b>11 – TOXICOLOGICAL INFORMATION</b>
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**11.1 Information on toxicological effects****Acute toxicity (LD/LC50 values):**

Ingredient	CAS Number	Data Type	Value
None	N/A	N/A	N/A

**Primary irritant effect:****On the skin:** Causes skin irritation.**On the eye:** Causes serious eye irritation**Subacute to chronic toxicity**

No further relevant information available.

**Sensitisation:** Based on available data, the classification criteria are not met.**Additional toxicological information:****Acute effects (acute toxicity, irritation and corrosivity):**

Harmful if swallowed.

**Repeated dose toxicity:**

Based on available data, the classification criteria are not met.

**CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**

Based on available data, the classification criteria are not met.

**STOT-single exposure**

May cause respiratory irritation.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

<b>12 – ECOLOGICAL INFORMATION</b>
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**12.1 Toxicity****Aquatic toxicity:** No further relevant information available.**12.2 Persistence and degradability** No further relevant information available.**12.3 Bioaccumulative potential** No further relevant information available.**12.4 Mobility in soil** No further relevant information available.**Additional ecological information:****General notes:**

Harmful to aquatic organisms.

Do not allow product to reach ground water, water course or sewage system.

**12.5 Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Other adverse effects** No further relevant information available.

<b>13 – DISPOSAL CONSIDERATIONS</b>
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**13.1 Waste treatment methods**

Genesee Polymers - GP-193

PAGE 8 of 11



## Recommendation

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous. Can be burned with household garbage after consulting with the waste disposal facility operator and the pertinent authorities and adhering to the necessary technical regulations.

### Uncleaned packaging:

**Recommendation:** Disposal must be made according to official regulations.

## 14 – TRANSPORTATION INFORMATION

### 14.1 Transport hazard information

**DOT**  
**UN Number:** UN1993  
**Proper shipping name:** Flammable liquids, n.o.s (hexamethyldisilazane)  
**Hazard class:** 3 Flammable liquids.  
**Label:** 3  
**Packing group:** II  
**Special instructions:** Limited Quantity for packages less than 30 kg (66 lb) and inner packagings less than 1L (0.3 gal).



**ADR**  
**UN Number:** UN1993  
**Proper shipping name:** 1993 FLAMMABLE LIQUID, N.O.S. (HEXAMETHYLDISILAZANE)  
**Hazard class:** 3 (F1) Flammable liquids.  
**Label:** 3  
**Packing group:** II  
**Transport category:** 2  
**Tunnel restriction code:** D/E



**IMDG**  
**UN Number:** UN1993  
**Proper shipping name:** FLAMMABLE LIQUID, N.O.S. (HEXAMETHYLDISILAZANE)  
**Hazard class:** 3 Flammable liquids.  
**Label:** 3  
**Packing group:** II



**IATA**  
**UN Number:** UN1993  
**Proper shipping name:** Flammable liquids, n.o.s. (Hexamethyldisilazane)  
**Hazard class:** 3 Flammable liquids.  
**Label:** 3  
**Packing group:** II



**14.2 Environmental hazards:**

**Marine pollutant:** No

**14.3 Special precautions for user:** Warning: Flammable liquids.

**Danger code:** 33

**EMS Number:** F-E, S-E

**Transport in bulk according to AnnexII of**

**MARPOL73/78 and the IBC Code:** Not applicable

**UN "Model Regulation":** UN1993 FLAMMABLE LIQUID, N.O.S. (1,1,1,3,3,3-HEXAMETHYLDISILAZANE), 3, II

**15 - REGULATIONS**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

**United States (USA)**

**SARA**

**Section 355 (extremely hazardous substances):**

Substance is not listed.

**Section 313 (Specific toxic chemical listings):**

Substance is not listed.

**TSCA (Toxic Substances Control Act):**

Substance is listed

**Proposition 65 (California)**

**Chemicals known to cause cancer:**

Substance is not listed

**Chemicals known to cause reproductive toxicity for females:**

Substance is not listed.

**Chemicals known to cause reproductive toxicity for males:**

Substance is not listed.

**Chemicals known to cause developmental toxicity:**

Substance is not listed.

**Carcinogenic Categories**

**EPA (Environmental Protection Agency)**

Substance is not listed.

**IARC (International Agency for Research on Cancer):**

Substance is not listed.

**TLV (Threshold Limit Value established by ACGIH):**

Substance is not listed.

**NIOSH-Ca (National Institute for Occupational Safety and Health):**

Substance is not listed.

**Canada**

**Canadian Domestic Substances list:**

Substance is listed.

**Canadian Ingredient Disclosure list (limit 0.1%):**

Substance is not listed.

**Canadian Ingredient Disclosure list (limit 1%):**

Substance is not listed.

**Other regulations, limitations and prohibitive regulations**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

**Substances of very high concern (SVHC) according to REACH, Article 57:**

Substance is not listed.

**15.2 Chemical safety assessment:**

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A Chemical Safety Assessment has not been carried out.

## 16 – OTHER INFORMATION

We believe the recommendations and technical information contained herein to be accurate. However, they are given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damages, direct or indirect, as a result of their use.

### **Abbreviations and acronyms:**

Eye Irrit. 2 Serious eye damage/eye irritation, Hazard Category 2

Skin irrit. 2 Skin corrosion/irritation, Hazard Category 2

Acute Tox.3: Acute toxicity, Hazard Category 3

Flam. Liq. 2 Flammable liquids, Hazard Category 2

STOT SE 3: Specific target organ toxicity- Single exposure, Hazard Category 3

### **Sources**

SDS Prepared by:

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