Safety Data Sheet

gpcsilicones.com

GENESEE POLYMERS CORPORATION

Version: 2

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1 – PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifiers

PRODUCT NAME: **GP-10(0.65)**
PRODUCT NUMBER: C-4219-BULK
DESCRIPTION: HEXAMETHYLDISILOXANE (MM)
CAS NUMBER: 107-46-0
EC NUMBER: 203-492-7

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 Laboratory chemicals

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@gpcsilicones.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.
The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H400, H411.
Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
Aquatic Aute 1 H400 Very toxic to aquatic life.
Acute Tox. 4 H302 Harmful if swallowed.
Classification according to Directive 67/548/EEC or Directive 1999/45/EC
R22:Harmful if swallowed.
R11: Highly flammable.
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic enviroment.

Information concerning particular hazards for human and environment:
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic enviroment.
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 product is classified and labelled according to the Globally Harmonised System (GHS).

PICTOGRAMS:

SIGNAL WORD: Danger

HAZARD DETERMINING COMPONENTS OF LABELLING:
hexamethyldisiloxane

HAZARD STATEMENTS
The following Hazard Statements are applicable only to the EU regulations and not the US GHS regulation: H400, H411
H225: Highly flammable liquid and vapour.
H302 Harmful if swallowed.
H400 very toxic to aquatic life.
PRECAUTIONARY STATEMENTS
P210: Keep away from heat/sparks/open flames/hot surfaces – No smoking.
P280: Wear protective gloves/protective clothing/eye protection.
P233 Keep container tightly closed.
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P370+P378: In case of fire: Use foam, powder or carbon dioxide for extinction.
P501: Dispose of contents/container in accordance with local/regional/national/international regulations.
The following Precautionary Statements are applicable only to the EU CPL regulations and not the OSHA GHS regulations: P273, P391.
P 301+312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330 Rinse mouth.
P270 Do not eat, drink or smoke when using this product.
P264: Wash thoroughly after handling.
P273 Avoid release to the environment.
P391 Collect spillage
HAZARD DESCRIPTION:
WHMIS-SYMBOLS:
B2-Flammable liquid.

NFPA-ratings (scale 0 – 4)

Health	1
Flammability	3
Reactivity	0

HMIS-ratings (scale 0 – 4)

Health	1
Flammability	3
Reactivity	0
Personal Protection	H

HMIS LONG TERM HEALTH SUBSTANCES
Substance is not 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: hexamethyldisiloxane
CAS-No.: 107-46-0
EC-No.: 203-492-7

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.
BREATHING (INHALATION): Supply fresh air; consult doctor in case of complaints.
SKIN (DERMAL): If skin irritation is experienced, consult a doctor.
Immediately wash with soap and water and rinse thoroughly.
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
Slight irritant effect on skin and mucous membranes.
Slight irritant effect on eyes.
Nausea in case of ingestion.
May cause gastro-intestinal irritation if ingested.
HAZARDS: Harmful if swallowed.

4.3 Indication of any immediate medical attention and special treatment needed
No further relevant information available.

5 – FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing agents:
Alcohol resistant foam.
Fire-extinguishing powder.
Water haze or fog.
For safety reasons unsuitable extinguishing agents: Water with full jet.

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.
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
Ensure adequate ventilation.
Keep away from ignition sources.
Protect from heat.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.
Wear protective equipment. Keep unprotected persons away.
6.2 Environmental precautions:
Do not allow product to reach sewage system or any water course.
Prevent from spreading (e.g. by damming-in or oil barriers.)
form respective authorities in case of seepage into water course or sewage system.
6.3 Methods and material for containment and
Prevent from spreading (e.g. by damming-in or oil barriers.)
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.
Ensure adequate ventilation.
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.
Keep away from heat and direct sunlight.
Prevent formation of aerosols.
Information about fire – and explosion protection:
Keep ignition sources away - Do not smoke.
Highly flammable liquid and vapour.
Protect against electrostatic charges.
Flammable gas-air mixtures may form in empty receptacles.
7.2 Conditions for safe storage, including any incompatibilities
Storage:
Requirements to be met by storerooms and receptacles:
Store in a cool, dry place.
Provide ventilation for receptacles.
Avoid storage near extreme heat, ignition sources or open flame.
Store below 77 F (25 C)
Information about storage in one common storage facility:
Store away from foodstuffs.
Protect from humidity and water.

Store away from oxidizing agents.
Do not store together with acids.
Do not store together with alkalis (caustic solutions).
Protect from humidity and water.

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.
Avoid contact with the eyes and skin.
Do not inhale gases / fumes / aerosols.

Respiratory protection:

Not required under normal conditions of use.
Use suitable respiratory protective device when high concentrations are present.
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.

Penetration time of glove material

480 min

For the permanent contact gloves made of the following materials are suitable: Nitrile rubber, NBR
As protection from splashes gloves made of the following materials are suitable: Nitrile rubber, NBR

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.
No further relevant information available.

9 – PHYSICAL / CHEMICAL PROPERITES

9.1 Information on basic physical and chemical properties
General Information
Appearance:

Form:	Liquid.
Colour:	Colourless
Odour:	Not determined.
Odour threshold:	Not determined.
pH value:	Not determined.
Change in condition:	
Melting point/Melting range:	-59 °C (-74 °F)
Boiling point/Boiling range:	101° C (214 ° F)
Flash point:	-1° C (30 ° F) (PMCC)
Flammability (solid, gaseous):	Not applicable.
Auto/Self-ignition temperature:	Not determined.
Decomposition temperature:	Not determined.
Self-igniting:	Not determined.
Danger of explosion:	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
Explosion limits:	
Lower:	0.5 Vol %
Upper:	21.8 Vol %
Vapor pressure:	175 hPa (131 mm Hg)
Density at 25 °C:	0.76 g/cm^3 (6.342 lbs/gal)
Relative density:	Not determined.
Vapour density at 20 °C	5.61 g/cm^3 (46.815 lbs/gal)
Evaporation rate:	Not determined.
Solubility in / Miscibility with Water:	0.0006 g/l
Partition coefficient (n-octanol/water)	3.1 log POW
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
9.2 Other information	No further relevant information available.

10 – STABILITY and REACTIVITY

10.1 Reactivity
10.2 Chemical stability

Thermal decomposition / conditions to be avoided
Keep away from heat/sparks/open flames/hot surfaces - No smoking.
Moist conditions
10.3 Possiblility of hazardous reactions
Highly flammable liquid and vapour.
Reacts with oxidizing agents.
Reacts with 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 amines.
Reacts with alkali (lyes).
Reacts with alcohols.
10.4 Conditions to avoid
Moisture
Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.
Avoid acids.
10.5 Incompatible materials:
Oxidizers, strong bases, strong acids
10.6 Hazardous decomposition products:
Carbon monoxide and carbon dioxide.
Silicon Oxides (SiOx)

11 – TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects
Acute toxicity (LD/LC50 values):

Ingredient	CAS Number	Data Type	Value
hexamethyldisiloxane	107-46-0	Oral LD50	1222 mg/kg (rat)
hexamethyldisiloxane	107-46-0	Inhalative LC50/4h	15956 ppm (rat)
hexamethyldisiloxane	107-46-0	EC50	0, 3 mg/kg (daphnia)
hexamethyldisiloxane	107-46-0	LC50	3, 02 mg/l (Oncorhynchus mykiss)

Primary irritant effect:
On the skin: Slight irritant effect on skin and mucous membranes.
On the eye: Slight irritant effect on eyes.
Sensitisation: No sensitising effects known.
Additional toxicological information:
When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12 – ECOLOGICAL INFORMATION

12.1 Toxicity
Aquatic toxicity: The material is harmful to the environment.
Hexamethyldisiloxane
CAS: 107-46-0
EC50 - 0.3 mg/kg (daphnia)
LC50 - 3.02 mg/l (Oncorhynchus mykiss)
12.2 Persistence and degradability biodegradable
12.3 Bioaccumulative potential No further relevant information available.
12.4 Mobility in soil No further relevant information available.
Additional ecological information:

Ecotoxical effects:
Remark: Toxic for fish
Toxic for algae
Inhibition of the development of the biomass.
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Due to available data on eliminability/decomposition and bioaccumulation potential prolonged term damage of the environment can not be excluded.
12.5 Results of PBT and vPvB assessment
PBT: Not applicable.
vPvB: Not applicable.
12.6 Other adverse effects No further relevant information available.

13 –DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Recommendation
Must not be disposed together with household garbage. Do not allow product to reach sewage system. 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 (hexamethyldisiloxane), MARINE POLLUTANT
Hazard class:	3 Flammable liquids.
Label:	3
Packing group:	III
Special instructions:	Product is additionally classified as a MARINE POLLUTANT based on MARPOL and DOT rules. Labelling as a MARINE POLLUTANT is not required for non-bulk single package shipments by motor vehicle, rail car or aircraft. Bulk packaging consists of a maximum capacity of greater than 450L (119 gallons) for a liquid and a maximum net mass greater than 400kg (882 pounds) for a solid.

ADR

UN Number:	UN1993
Proper shipping name:	1993 FLAMMABLE LIQUIDS, N.O.S. (hexamethyldisiloxane), MARINE POLLUTANT
Hazard class:	3 (F1) Flammable liquids.
Label:	3
Packing group:	III
Limited quantities:	1L
Excepted quantities:	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
Transport category:	2

Tunnel restriction code: D/E


IMDG
UN Number: UN1993
Proper shipping name: FLAMMABLE LIQUID, N.O.S. (hexamethyldisiloxane), MARINE POLLUTANT
azard class: 3 Flammable liquids.
abel: 3
cking group: III
Limited quantities: II
Excepted quantities: Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 500 ml


IATA
UN Number: UN1993
Proper shipping name: Flammable liquid n.o.s. (hexamethyldisiloxane)
Hazard class: 3 Flammable liquids.
bel: 3
Packing group: III

14.2 Environmental hazards:
Marine pollutant: Yes
Symbol (fish and tree)
Special marking (ADR): Symbol (fish and tree)
Special marking (IATA) Symbol (fish and tree)
14.3 Special precautions for user: Warning: Flammable liquids.
Danger code: 30
EMS Number: F-E, S-E
Transport in bulk according to AnnexII of MARPOL73/78 and the IBC Code: Not applicable
nnel restriction code:
UN "Model Regulation": UN1993, FLAMMABLE LIQUIDS, N. O. S. (hexamethyldisiloxane), ENVIROMENTALLY HAZARDOUS, 3, III

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.
ARC (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:
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:
ADR: Accord europeen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commerical Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (Canada)
WHMIS: Workplace Hazardous Materials Information System (Canada)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50 Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Liq. 2 Flammable liquids, Hazard Category 2

Acute Tox.4: Acute toxicity, Hazard Category 4
Aquatic Chronic 2: Hazardous to the aquatic environment- Chronic Hazard Category 2
Aquatic Acute 1: Hazardous to the aquatic enviroment-AcuteHazard, Category 1

Sources
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