1 – PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifiers

PRODUCT NAME: GP-526
PRODUCT NUMBER: C-2211-BULK
DESCRIPTION: GAMMA-MERCAPTOPROPYL METHYL DIMETHOXYSILANE
CAS NUMBER: 31001-77-1
EC NUMBER: 250-426-8

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

USE OF SUBSTANCE: Industrial / Chemical intermediate

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).
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2 H319 Causes serious eye irritation. Classification according to Directive 67/548/EEC or Directive 1999/45/EC
R36/38 Irritating to eyes and skin.
Information concerning particular hazards for human and environment:
Not Applicable

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: Warning.

HAZARD DETERMINING COMPONENTS OF LABELLING:
Methylphenyldimethoxysilane

HAZARD STATEMENTS
H315: Causes skin irritation.
H319: Causes serious eye irritation.
H227 Combustible liquid
H302 Harmful if swallowed.
H335 May cause respiratory irritation.

PRECAUTIONARY STATEMENTS
P280: Wear protective gloves/protective clothing/eye protection.
P264: Wash thoroughly after handling.
P302+P352 IF ON SKIN: wash with plenty of water.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER/doctor if you feel unwell.
P271 Use only outdoors or in a well-ventilated area.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P362 & P364 Take off contaminated clothing and wash before reuse.
P370+378: In case of fire: Use for extinction: CO2, powder or water spray.
P403+P235: Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/state/national/international regulations.
P332+P313 If skin irritation occurs; Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.

HAZARD DESCRIPTION:
WHMIS-SYMBOLS:
N/A

NFPA-ratings (scale 0 – 4)

<table>
<thead>
<tr>
<th></th>
<th>2</th>
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<tbody>
<tr>
<td>Health</td>
<td></td>
</tr>
<tr>
<td>Flammability</td>
<td>2</td>
</tr>
<tr>
<td>Reactivity</td>
<td>1</td>
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</table>

HMIS-ratings (scale 0 – 4)

<table>
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<th></th>
<th>2</th>
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</thead>
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<td>Health</td>
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<td>Flammability</td>
<td>2</td>
</tr>
<tr>
<td>Reactivity</td>
<td>1</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>H</td>
</tr>
</tbody>
</table>

HMIS LONG TERM HEALTH SUBSTANCES
Substance is not listed.

Genesee Polymers - GP-526
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: 3-Mercaptopropylmethyldimethoxysilane
CAS-No.: 31001-77-1
EC-No.: 250-426-8

Hazardous components:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CLASSIFICATION</th>
<th>CONCENTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impurities and stabilising additives: methanol</td>
<td>FLAM. LIQ. 2 H225 EYE IRRIT. 2, H319</td>
<td>&lt; 2%</td>
</tr>
<tr>
<td>CAS: 67-56-1 EINECS: 200-659-6 Index number: 603-001-00-X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 – FIRST-AID MEASURES

4.1 Description of first aid measures
GENERAL INFORMATION: Immediately remove any clothing soiled by the product. Consult a physician. Show this safety data sheet to the doctor in attendance. Take affected persons out into fresh air.

BREATHING (INHALATION): Supply fresh air; consult doctor in case of complaints. In case of irregular breathing or respiratory arrest provide artificial respiration.

SKIN (DERMAL): Immediately remove any clothing soiled by the product. Immediately wash with soap and water and rinse thoroughly. If skin irritation is experienced, consult a doctor.

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

SWALLOWING (INGESTION): Do not induce vomiting; call for medical help immediately. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
Gastric or intestinal disorders when ingested. Coughing. Irritant to skin and mucous membranes. Irritant to eyes. Difficulty breathing. Nausea in case of ingestion.
On contact with water this compound liberates ethanol which is known to have a chronic effect on the central nervous system.
HAZARDS: Danger of impaired breathing. Vapours may cause drowsiness and dizziness.

4.3 Indication of any immediate medical attention and special treatment needed
NOTE TO PHYSICIAN: This product reacts with water in the acid contents of the stomach to form methanol.

5 – FIRE-FIGHTING MEASURES

5.1 Extinguishing media
Suitable extinguishing agents:
Genesee Polymers - GP-526
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 spray.

6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
Ensure adequate ventilation.
For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

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.

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.
Ensure adequate ventilation.
Send for recovery or disposal in suitable receptacles.

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.
Fumes can combine with air to form an explosive mixture.
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.

Information about storage in one common storage facility:
Store away from foodstuffs.
Protect from humidity and water.
**Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Keep container tightly sealed.
**7.3 Specific end use(s)**
No further relevant information available.

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**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:**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS number</th>
<th>Data type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>methanol</td>
<td>67-56-1</td>
<td>ACGIH, TWA</td>
<td>200 ppm</td>
</tr>
<tr>
<td>methanol</td>
<td>67-56-1</td>
<td>ACGIS, STEL</td>
<td>250 ppm</td>
</tr>
</tbody>
</table>

**DNELs** No further relevant information available.

**PNECs** No further relevant information available.

**Ingredients with biological limit value**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS number</th>
<th>Data type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**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.
Use only in well ventilated areas
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.

**Respiratory protection:**
Use suitable respiratory protective device when high concentrations are present.
Use suitable respiratory protective device when aerosol or mist is formed.
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**

Genesee Polymers - GP-526
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**

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**

No further relevant information available.

**Risk management measures**

See section 7 for additional information.

No further relevant information available.

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### 9 – PHYSICAL / CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

**General Information**

**Appearance:**

- **Form:** Liquid.
- **Colour:** Clear
- **Odour:** Not determined.
- **Odour threshold:** Not determined.
- **pH value:** Not determined.

**Change in condition:**

- **Melting point/Melting range:** <0 °C (<32 °F)
- **Boiling point/Boiling range:** 96 °C (205 °F) @ 30 mm Hg
- **Flash point:** 93 °C (199 °F)
- **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:** Not determined.
- **Upper:** Not determined.
- **Vapor pressure:** Not determined.
- **Density at 25 °C:** 1 g/cm³ (8.345 lbs/gal)
- **Relative density:** Not determined.
- **Vapour density at 20 °C:** Not determined.
- **Evaporation rate:** Not determined.

**Solubility in / Miscibility with:**

- **Water:** Reacts with water

**Partition coefficient (n-octanol/water):** Not determined.

**Viscosity:**

- **Dynamic:** Not determined.
- **Kinematic:** Not determined.

**VOC content:**

- 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 and direct sunlight.

10.3 Possibility of hazardous reactions
Flammable.
Reacts with oxidizing agents.
Reacts with strong acids.
Reacts with water.
Can form explosive mixtures in air if heated above flash point and/or when sprayed or atomised.
Toxic fumes may be released if heated above the decomposition point.

10.4 Conditions to avoid
Moisture
Keep ignition sources away - Do not smoke.
Store away from oxidizing agents.
Keep away from heat and direct sunlight.

10.5 Incompatible materials:
Keep away from water. Reacts with water and moisture in air to liberate methanol.

10.6 Hazardous decomposition products:
Carbon monoxide and carbon dioxide.
Methanol in case of hydrolysis.

11 – TOXICOLOGICAL INFORMATION

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

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Data Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Primary irritant effect:
On the skin: Irritant to skin and mucous membranes.
On the eye: Causes serious eye irritation
Sensitisation: No sensitising effects known.

Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version. Irritant

12 – ECOLOGICAL INFORMATION

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:
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.

Genesee Polymers - GP-526
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
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. 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: Combustible liquid, n.o.s., (3-(Dimethoxymethylsilyl)propanethiol)
Hazard class: NONE
Packing group: III

ADR
UN Number: Not Regulated
Proper shipping name: Not Regulated
Hazard class: Not Regulated
Packing group: Not Regulated

IMDG
UN Number: Not Regulated
Proper shipping name: Not Regulated
Hazard class: Not Regulated
Packing group: Not Regulated

IATA
UN Number: Not Regulated
Proper shipping name: Not Regulated
Hazard class: Not Regulated
Packing group: Not Regulated
14.2 Environmental hazards:
Marine pollutant: No
14.3 Special precautions for user: Not applicable.
Danger code: Not applicable
EMS Number: Not applicable

Transport in bulk according to AnnexII of MARPOL73/78 and the IBC Code: Not applicable
UN “Model Regulation”: -

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:
Present in trace quantities: Methanol.

Carcinogenic Categories
EPA (Environmental Protection Agency)
Substance is not listed.
IARC (International Agency for Research on Cancer):
Substance is not listed.
LV (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%):
None of the ingredients are listed.
Canadian Ingredient Disclosure list (limit 1%):
Substance is 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:
Genesee Polymers - GP-526
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 européen 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
ACGIH: American Conference of Governmental Industrial Hygienists
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
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
Skin irrit. 2 Skin corrosion/irritation, Hazard Category 2
Eye Irrit. 2 Serious eye damage/eye irritation, Hazard Category 2

Sources:
SDS Prepared by:
Genesee Polymers Corporation

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Website: www.chemtelinc.com