Safety Data Sheet

according to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision: November 22, 2019

1 Identification

· Product identifier

· Trade name: <u>GP-526</u> · Product code: C-2211

· Recommended use and restriction on use

· Recommended use: Silicone Intermediate Synthesis, Thiol-ene UV Cure Systems

Restrictions on use: No relevant information available.

Details of the supplier of the Safety Data Sheet

· Manufacturer/Supplier:

Genesee Polymers Corporation

G-4099 S. Dort Hwy. Burton, MI 48529 (810) 715-5018

customerservice@gpcsilicones.com

· Emergency telephone number:

ChemTel Inc.

(800)255-3924 (North America)

+1 (813)248-0585 (International)



2 Hazard(s) identification

· Classification of the substance or mixture

Flam. Lig. 4 H227 Combustible liquid.

Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:



GHS07

- · Signal word: Warning
- Hazard statements:

H227 Combustible liquid.

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

· Precautionary statements:

P210 Keep away from flames and hot surfaces. – No smoking.

P261 Avoid breathing mist, vapors, or spray.

P264 Wash thoroughly after handling.

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

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection. P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P330 Rinse mouth.

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P302+P352 If on skin: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

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.

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

3 Composition/information on ingredients

· Chemical characterization: Mixtures

| · Components: | | |
|---------------|---|------|
| 31001-77-1 | 3-(dimethoxymethylsilyl)propanethiol | ≥95% |
| | ① Acute Tox. 4, H302; Skin Sens. 1B, H317 Flam. Liq. 4, H227 | |
| 67-56-1 | Methanol | ≤2% |
| | Flam. Liq. 2, H225 Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT SE 1, H370 | |

· Additional information:

For the listed ingredient(s), the identity and/or exact percentage(s) are being withheld as a trade secret. For the wording of the listed Hazard Statements, refer to section 16.

4 First-aid measures

- Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact:

Wash with soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; immediately call for medical help.

· Most important symptoms and effects, both acute and delayed:

Allergic reactions

Gastric or intestinal disorders when ingested.

Nausea in case of ingestion.

Disorientation

Vision disorders.

Blindness

· Danger:

Harmful if swallowed.

May cause an allergic skin reaction.

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Indication of any immediate medical attention and special treatment needed:

Medical supervision for at least 48 hours.

Contains 3-(dimethoxymethylsilyl)propanethiol. May produce an allergic reaction.

Treat skin and mucous membrane with antihistamine and corticoid preparations. If medical advice is needed, have product container or label at hand.

5 Fire-fighting measures

- **Extinguishing media**
- Suitable extinguishing agents:

Foam

Carbon dioxide

Fire-extinguishing powder

Gaseous extinguishing agents

Water fog / haze

- · For safety reasons unsuitable extinguishing agents: No relevant information available.
- · Special hazards arising from the substance or mixture

Combustible liquid.

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

- 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.

Use large quantities of foam as it is partially destroyed by the product.

Cool endangered containers with water fog.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation.

Keep away from ignition sources.

For large spills, use respiratory protective device against the effects of fumes/dust/aerosol.

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.

Methods and material for containment and cleaning up

Absorb with non-combustible liquid-binding material (sand, diatomite, acid binders, universal binders). Send for recovery or disposal in suitable receptacles.

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

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- · Handling
- · Precautions for safe handling:

Avoid splashes or spray in enclosed areas.

Use only in well ventilated areas.

· Information about protection against explosions and fires:

Combustible liquid.

Keep ignition sources away - Do not smoke.

- · Conditions for safe storage, including any incompatibilities
- Requirements to be met by storerooms and 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 oxidizers, strong acids, strong bases.

- · Further information about storage conditions: Keep containers tightly sealed.
- · Specific end use(s) No relevant information available.

8 Exposure controls/personal protection

· Control parameters

| · Components with limit values that require monitoring at the workplace: | | |
|--|--|--|
| 67-56-1 Methar | 67-56-1 Methanol | |
| PEL (USA) | Long-term value: 260 mg/m³, 200 ppm | |
| REL (USA) | Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin | |
| TLV (USA) | Short-term value: 328 mg/m³, 250 ppm Long-term value: 262 mg/m³, 200 ppm Skin; BEI | |
| EL (Canada) | Short-term value: 250 ppm Long-term value: 200 ppm Skin | |
| EV (Canada) | Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm Skin | |
| LMPE (Mexico) | Short-term value: 250 ppm Long-term value: 200 ppm PIEL, IBE | |

· Ingredients with biological limit values:

67-56-1 Methanol

BEI (USA) 15 mg/L

Medium: urine Time: end of shift

Parameter: Methanol (background, nonspecific)

- · Exposure controls
- General protective and hygienic measures:

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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.

- Engineering controls: Provide adequate ventilation.
- · Breathing equipment:

Not required under normal conditions of use.

Use suitable respiratory protective device in case of insufficient ventilation.

· Protection of hands:



Protective gloves

· Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

- · Body protection: Protective work clothing
- · Limitation and supervision of exposure into the environment

No relevant information available.

· Risk management measures No relevant information available.

| 9 Physical and chemical properties | | |
|---|---|--|
| Information on basic physical and chemical properties Appearance: | | |
| Form: Color: | Liquid Colorless | |
| · Odor: · Odor threshold: | Sulphurous Not determined. | |
| · pH-value: · Melting point/Melting range: · Boiling point/Boiling range: | Not determined. Not determined. Not determined. | |
| · Flash point: | >60 °C (>140 °F) | |
| · Flammability (solid, gaseous): | Not applicable. | |
| · Auto-ignition temperature: | Not determined. | |
| · Decomposition temperature: | Not determined. | |
| · Danger of explosion: | Not determined. | |
| · Explosion limits Lower: Upper: | Not determined. Not determined. | |

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|-------------------------------------|------------------------------------|------------------|
| Oxidizing properties: | Non-oxidizing. | |
| Vapor pressure: | Not determined. | |
| Density: | | |
| Relative density: | >1 | |
| Vapor density: | Not determined. | |
| Evaporation rate: | Not determined. | |
| Solubility in / Miscibility with | | |
| Water: | Reacts with water. | |
| Partition coefficient (n-octanol/wa | ater): Not determined. | |
| Viscosity | | |
| Dynamic: | Not determined. | |
| Kinematic: | Not determined. | |
| Other information | No relevant information available. | |

10 Stability and reactivity

- · Reactivity: No relevant information available.
- · Chemical stability: Stable under normal temperatures and pressures.
- · Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

· Possibility of hazardous reactions

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 atomized.

Reacts with strong acids and alkali.

Reacts with oxidizing agents.

Reacts with peroxides and other radical forming substances.

- · Conditions to avoid Keep ignition sources away Do not smoke.
- · Incompatible materials Oxidizers, strong bases, strong acids
- · Hazardous decomposition products

Under fire conditions only:

Silicon oxides.

Carbon monoxide and carbon dioxide

11 Toxicological information

- Information on toxicological effects
- · Acute toxicity: Harmful if swallowed.

| · LD/LC50 values that are relevant for classification: | | | |
|--|------|----------------|--|
| ATE (Acute Toxicity Estimate) | | | |
| Oral | LD50 | 600-1200 mg/kg | |
| Dermal | LD50 | >2000 mg/kg | |

31001-77-1 3-(dimethoxymethylsilyl)propanethiol

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Oral LD50 800-1100 mg/kg (rat)
Dermal LD50 2100-2500 mg/kg (rabbit)

- Primary irritant effect:
- · On the skin: Based on available data, the classification criteria are not met.
- · On the eye: Based on available data, the classification criteria are not met.
- · Sensitization: Sensitization possible through skin contact.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Probable route(s) of exposure:

Ingestion.

Inhalation.

Eve contact.

Skin contact.

- · Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- · **Carcinogenicity**: Based on available data, the classification criteria are not met.
- · Reproductive toxicity: Based on available data, the classification criteria are not met.
- · STOT-single exposure: Based on available data, the classification criteria are not met.
- · STOT-repeated exposure: Based on available data, the classification criteria are not met.
- · Aspiration hazard: Based on available data, the classification criteria are not met.

12 Ecological information

- · Toxicity
- · Aquatic toxicity

Toxic to aquatic life with long lasting effects.

31001-77-1 3-(dimethoxymethylsilyl)propanethiol

EC50/48h 6.7 mg/kg (daphnia)

- · Persistence and degradability No relevant information available.
- · Bioaccumulative potential: No relevant information available.
- · Mobility in soil: No relevant information available.
- Additional ecological information
- · General notes: Avoid release to the environment.
- · Other adverse effects No relevant information available.

13 Disposal considerations

- Uncleaned packagings
- · **Recommendation:** Disposal must be made according to official regulations.

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| Transport information | |
|---|---|
| UN-Number | 114.4000 |
| DOT ADR/RID/ADN, IMDG, IATA | NA1993 UN3082 |
| UN proper shipping name DOT | Combustible liquid, n.o.s. (3-(dimethoxymethylsil propanethiol, methanol) |
| ADR/RID/ADN, IMDG, IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANC LIQUID, N.O.S. (3-(dimethoxymethylsilyl)propanethic |
| Transport hazard class(es) | |
| DOT | |
| CONTRACTOR OF THE PARTY OF THE | |
| Class Label | 3 3 |
| ADR/RID/ADN | |
| (1) | |
| Class Label | 9 (M6) 9 |
| IMDG, IATA | - |
| | |
| Class | 9 |
| Label | 9 |
| Packing group DOT, ADR/RID/ADN, IMDG, IATA | III |
| Environmental hazards | Product contains environmentally hazardo substances: 3-(dimethoxymethylsilyl)propanethiol |
| Marine pollutant: | Symbol (fish and tree) |
| Special precautions for user | Warning: Miscellaneous dangerous substances a articles |
| Danger code (Kemler): EMS Number: | 90 F-A,S-F |
| Transport in bulk according to Annex MARPOL73/78 and the IBC Code | II of Not applicable. |
| Transport/Additional information: | |
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| · DOT | Classified as combustible under US DOT regulations. Labeling is only required for single packages ≥119 US gal / 450 L. |

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · United States (USA)
- ·SARA
- Section 302 (extremely hazardous substances):

None of the ingredients are listed.

· Section 355 (extremely hazardous substances):

None of the ingredients are listed.

Section 313 (Specific toxic chemical listings):

67-56-1 Methanol

TSCA (Toxic Substances Control Act)

All ingredients are listed or exempt.

- · Proposition 65 (California)
- Chemicals known to cause cancer:

None of the ingredients are listed.

Chemicals known to cause developmental toxicity for females:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity for males:

None of the ingredients are listed.

· Chemicals known to cause developmental toxicity:

67-56-1 Methanol

· EPA (Environmental Protection Agency):

None of the ingredients are listed.

· IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

· Canadian Domestic Substances List (DSL):

All ingredients listed on DSL or NDSL.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road IMDG: International Maritime Code for Dangerous Goods

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DOT: US Department of Transportation IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

OSHA: Occupational Safety & Health Administration

Flam. Liq. 2: Flammable liquids – Category 2 Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Skin Sens. 1: Skin sensitisation – Category 1
Skin Sens. 1B: Skin sensitisation – Category 1B

STOT SE 1: Specific target organ toxicity (single exposure) - Category 1

Sources

Website, European Chemicals Agency (echa.europa.eu)

Website, US EPA Substance Registry Services (ofmpub.epa.gov/sor internet/registry/substreg/home/overview/home.do)

Website, Chemical Abstracts Registry, American Chemical Society (www.cas.org)

Patty's Industrial Hygiene, 6th ed., Rose, Vernon, ed. ISBN: 978-0-470-07488-6

Casarett and Doull's Toxicology: The Basic Science of Poisons, 8th Ed., Klaasen, Curtis D., ed., ISBN: 978-0-07-176923-5.

Safety Data Sheets, Individual Manufacturers

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