Silicone Gel

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / March 26, 2012 / Rules and Regulation

Revision Date: 11-Aug-2025
Supersedes: 30-Apr-2020

1 PRODUCT & COMPANY IDENTIFICATION

Product Name: Silicone Gel
Synonyms: No data available
INCI Name: Cyclopentasiloxane (and) Dimethicone/ Vinyltrimethylsiloxysilicate Crosspolymer
CAS Number: 541-02-6, 540-97-6
Formula: No data available
Product Form: Liquid (Gel)
Product Use: Cosmetic use

Distributor: MakingCosmetics Inc.
Address: 10800 231st Way NE
Redmond, WA 98053 (USA)

Phone / Fax: 425-292-9502 / 425-292-9601
Web: **www.makingcosmetics.com**

Emergency Telephone Number: 1-800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

GHS Classification: Flammable liquids: Category 4
GHS Signal Word: **WARNING!**
GHS Hazard Pictograms:

GHS Hazard Statements: H227: Combustible liquid
GHS Precautionary Statements: P103: Read label before use.
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280: Wear protective gloves/eye protection/face protection.
P243: Take action to prevent static discharges.
P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P370+P378: In case of fire: use water spray, extinguishing powder, foam or carbon dioxide to extinguish.
P403+P235: Store in a well-ventilated place. Keep cool.
P404: Store in a closed container.
P501: Dispose of contents/container to waste disposal.

Potential Health Hazards: Eyes: Not expected to be an irritant.
Inhalation: Not expected to be an irritant.
Skin: Not expected to be an irritant.
Ingestion: May cause nausea, vomiting, and diarrhea.

NFPA Ratings (704):

Health	N/A	N/A
Flammability	N/A	N/A
Reactivity	N/A	N/A
Specific Hazard	N/A	

3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %	Molecular Weight
Cyclopentasiloxane	541-02-6	> 75 - < 100	Not Available
Dimethicone/ Vinyltrimethylsiloxysilicate Crosspolymer	540-97-6	≥ 1 - < 3	Not Available

4 FIRST AID MEASURES

Eyes: If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min. Treat

	symptomatically.
Inhalation:	If inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Treat symptomatically.
Skin:	For skin contact, immediately wipe away excess material. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water. Treat symptomatically.
Ingestion:	Do Not Induce Vomiting. Never give anything by mouth to an unconscious person. For ingestion, if conscious, give several glasses of water. If vomiting does occur, give additional fluids. If unconscious place in stable sideways position. Treat symptomatically.
General Information:	Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

5 FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:	May be combustible at high temperatures. Use appropriate media (AFFF alcohol compatible foam, carbon dioxide) for surrounding environment and adjacent fire. Water may be ineffective in controlling fires of this material. Do not use water to fight these fires.
Special protective equipment & precautions for firefighters:	Wear self-contained breathing apparatus (SCBA) and full protective clothing, including eye protection and boots. Water may be used to cool tanks and structures adjacent to the fire.
Flash Points:	169ºF (76˚C)
Specific hazards arising from the chemical:	Caution! OSHA Combustible liquid and vapor. Vapors are heavier than air and may travel along the ground, be moved by ventilation systems, settle in pits or low areas, and be ignited by ignition sources distant from the handling point. The material is lighter than water, burning spilled material will float on top of any water released from hose or sprinkler systems spreading the fire beyond the initial fire response area. Never use welding or cutting torch on or near any container of this material, even if empty, because an explosion could occur. Hazardous decomposition products include carbon monoxide, carbon dioxide, silicon dioxide, formaldehyde, various hydrocarbon fragments. See also Stability and reactivity section.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures:	Avoid inhaling mists and vapors. Avoid contact with eyes and skin. Eliminate all sources of ignition. Do not seal collecting vessel gas-tight. Do not try to clean up the leak without proper protective equipment. See section 8 for recommendations on the use of personal protective equipment.
Environmental precautions:	Avoid liquid release into sewers/public water/environment. Contain any fluid that runs out using suitable material (e.g. earth). Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll-free phone number (800) 424-8802.
Methods and material for containment and cleaning up:	Do not flush away with water. Take up mechanically and dispose of according to local/ state/federal regulations. For small amounts, absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Dispose of absorbed material in accordance with the regulations.

7 HANDLING & STORAGE

Precautions for safe handling:	Use with adequate ventilation. Keep container closed when not in use. Keep away from sources of ignition and do not smoke. In partly emptied containers formation of explosive mixtures is possible. Take precautionary measures against electrostatic charging. Ignitable vapors may be released during processing or curing. Use good personal hygiene practice. See section 8 for recommendations on the use of personal protective equipment.
Conditions for safe storage, incl. any incompatibilities:	Do not store with fire-promoting materials. Store in a dry location to prevent exposure to water or moist air. Keep container tightly closed and store in a cool, well-ventilated place. Store in a well-ventilated area to limit the accumulation of vapors released from vented or unsealed containers. Store in the original container. Store away from incompatible materials (see section 10 for incompatibilities).

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Exposure Limits	Basis	Entity
Silicone Gel	Not available		

TWA: Time Weighted Average over 8 hours of work.
TLV: Threshold Limit Value over 8 hours of work.
REL: Recommended Exposure Limit
PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.
IDLH: Immediately Dangerous to Life or Health
WEEL: Workplace Environmental Exposure Levels
CEIL: Ceiling

Personal Protection:

Eyes: Wear safety glasses with side protection shield.
Inhalation: Use only with adequate ventilation. Respiratory protection is not normally required.
Body: Wear any liquid-tight rubber or vinyl gloves. Additional protective clothing or equipment is not normally required.
Other: Use good personal hygiene practices. Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/aerosol. To control flammable/combustible vapors, use local exhaust ventilation which meets the requirements of ANSI Z9.2 is recommended to control airborne contaminants at the point of use. Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid thixotropic gel	**Vapor Pressure at 68ºF:**	1.3 hPa
Odor:	Slight, characteristic	**Vapor Density:**	No data available
Odor Threshold:	No data available	**Evaporation Rate:**	No data available
Color:	Colorless	**Flammability:**	No data available
Molecular Weight:	No data available	**Upper/lower Explosive Limit:**	Not determined
pH:	Not applicable	**Flash Point:**	169ºF (76˚C)
Boiling Point/Range:	410 ˚F (210˚C) at 1013 hPa	**Specific Gravity:**	No data available
Melting Point/Range:	111˚F (44˚C)	**Water Solubility:**	Virtually insoluble
Relative Density:	No data available	**Ignition Temperature:**	725˚F (385˚C)
Partition Coefficient: n-octanol/water:	No data available	**Decomposition Temperature:**	No data available
Viscosity, Dynamic at 77ºF:	100000 mPa.s	**Explosive Properties:**	No data available
Oxidizing Properties:	No data available	**Density:**	0.96 g/cm3
Corrosivity:	Not corrosive to steel/aluminum	**Percent Volatiles:**	80%

10 STABILITY AND REACTIVITY

Reactivity: No data available.
Chemical Stability: If stored and handled in accordance with standard industrial practices no hazardous reactions are known.
Hazardous Polymerization: Hazardous polymerization cannot occur.
Conditions to Avoid: Although this product is not expected to react with commonly used materials of construction and process equipment, it is advised that any rubber or plastic items such as hoses and gaskets be tested prior to large scale processing to ensure there is no degradation of performance or durability. Keep away from heat, open flames, and other sources of ignition.
Incompatible Materials: Oxidizing materials (oxygen, oxidizers, peroxides, etc.)
Hazardous Decomposition Products: Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 302˚F (150˚C) through oxidation.
Possible Hazardous Reactions: No data available.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity: For this endpoint no toxicological test data is available for the whole product.
Acute Toxicity Estimate (ATE): ATEmjx (Oral): > 2000 mg/kg.
Skin: (Rabbit, Male/Female, Dermal) Component: Cyclopentasiloxane; LD50: > 2000 mg/kg (OECD 402)
Eyes: (Rabbit) Component: Cyclopentasiloxane: Not irritating (OECD 405).
Inhalation: (Rat, Male/Female, Inhalation-Spray) Component: Cyclopentasiloxane; LC50: 8.67 mg/l; 4 hours (OECD 403).
(Rat, Male/Female, Inhalation-Vapor) Component: Cyclopentasiloxane; LC50: > 545 ppm; 4 hours; No mortality at room temperature in highly enriched or saturated atmosphere (OECD 403)
Ingestion: (Rat, Male/Female, Oral) Component: Cyclopentasiloxane; LD50: > 5000 mg/kg (OECD 401).

Carcinogenicity:	
NTP:	No component of this product present at levels greater than or equal to 0.1%is identified as a known or anticipated carcinogen by NTP.
IARC:	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Teratogenicity:	No data available.
Germ Cell Mutagenicity:	All studies for Cyclopentasiloxane show negative germ cell mutagenicity.
Specific Target Organ Toxicity:	Component: Cyclopentasiloxane: Based on the available data the criteria for classification as toxic after repeated exposure are not fulfilled. No data available for single exposure.
Reproductive Toxicity:	(Rat, both sexes) Component: Cyclopentasiloxane; Test: two generation study by inhalation (vapor); 7 d/w; 6 hours/day; Result: NOAEL: >=160 ppm; Symptoms/Effect: Nothing abnormal detected (EPAOPPTS 870.3800).
Respiratory/Skin Sensitization:	(Mouse, Dermal) Component: Cyclopentasiloxane; Local lymph node assay (LLNA); Not sensitizing; (OECD 429).
Skin Corrosion/Irritation:	(Rabbit) Component: Cyclopentasiloxane: Not irritating (OECD 404).
Aspiration Hazard:	Based on the physical-chemical properties of the product no aspiration hazard must be expected.
Data on Substances:	Data derived for the product as a whole are of higher priority than data for single ingredients.

12 ECOLOGICAL INFORMATION

Ecotoxicity:	No expected damaging effects to aquatic organisms. According to current knowledge adverse effects on water purification plants are not expected.
Aquatic Vertebrate:	(Rainbow Trout) Component: Cyclopentasiloxane; LC50: > 16 pg/L (measured); 96 hours; No mortality with the given dose. The given value is equal to the maximum technically obtainable concentration in the medium. (OECD 204). (Rainbow Trout) NOEC (early life stage test): >= 14 pg/L (measured); 90 days; No substance related effects. The given value is equal to the maximum technically obtainable concentration in the medium (OECD 210).
Aquatic Invertebrate:	(Daphnia magna-Dynamic) Component: Cyclopentasiloxane; EC50:> 2.9 pg/L (measured); 48 hours; No substance related effects (OECD 201). (Daphnia magna-Semistatic) NOEC (reproduction): >=15 pg/L (measured); 21 days; No substance related effects. The given value is equal to the maximum technically obtainable concentration in the medium (OECD 211).
Terrestrial:	(Pseudokirchneriella subcapitata) Component: Cyclopentasiloxane; NOEC (growth rate): > 12 pg/L (measured); 72 hours; No substance related effects. The given value is equal to the maximum technically obtainable concentration in the medium (OECD 201). (Sludge) EC50: (respiratory inhibition): > 2000 mg/l (nominal); 3 hours.
Persistence and Degradability:	Component: Cyclopentasiloxane (D5): Forms thin oil film on surface of water. Absorbed by floating particles. Separation by sedimentation. Test: CO2 formation; Result: 0.14%; 28 days; Not readily biodegradable (OECD 310).
Bioaccumulative Potential:	Under controlled laboratory conditions Cyclopentasiloxane dissolved in water bioconcentrates in fish. However, available monitoring data indicate that the substance does not bio magnify in aquatic and terrestrial food webs in the environment.
Mobility in Soil:	Cyclopentasiloxane (D5) has a very low water solubility, easily evaporates to air, and partitions to organic matter. It is degraded in air by reaction with hydroxyl radicals. In soil Cyclopentasiloxane is removed by several simultaneously occurring processes including volatilization, hydrolysis, and clay-catalyzed degradation.
PBT and vPvB Assessment:	The product contains substances >= 0.1% that have been subjected to the SVHC process according to REACh regulation (EC No 1907/2006 Art.57 as fulfilling the PBT and/or vPvB criteria according to REACh regulation (EC) No 1907/2006 Annex XIII. However, Cyclopentasiloxane (D5) does not behave similarly to known vPvB substances. The weight of scientific evidence from field studies shows that D5 is not biomagnifying in aquatic and terrestrial food webs. D5 in air will degrade by reaction with naturally occurring hydroxyl radicals in the atmosphere. Any D5 in air that does not degrade by this reaction is not expected to deposit from the air to water, to land, or to living organisms.
Other Adverse Effects:	None known.
Data on Substances:	Data derived for the product as a whole are of higher priority than data for single ingredients.

13 DISPOSAL CONSIDERATIONS

Waste Residues:	Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with any applicable governmental regulations. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product.
Product Containers:	Uncleaned packaging should be treated with the same precautions as the material. Uncleaned containers should not be reused to hold another material due to the potential for reaction between residual product and incompatible materials. After emptying contaminated containers may be cleansed and recycled. Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies, if necessary, before disposing of waste product container.

The information in section 13 is for the product as shipped. Use and/or alterations to the product may change the characteristics of the material and alter the waste classification and proper disposal methods

14 TRANSPORT INFORMATION

DOT (Dept. of Transportation, USA):	Not regulated for transport. DOT regulated as a Combustible Liquid when packaged in bulk containers (>119 Gallons). Not regulated in containers up to 119 Gal./450 L each.
TDG (Transportation of Dangerous Goods, Canada):	No data available.
IMDG (International Maritime Dangerous Goods):	Not regulated for transport.
IATA (International Air Transport Association):	Not regulated for transport.
ICAO (International Civil Aviation Organization):	Not regulated for transport.

15 REGULATORY INFORMATION

TSCA Inventory Status:	Not all ingredients are listed on the TSCA Inventory. This material is exempt from TSCA regulations if it is used in an application regulated solely by the Federal Food, Drug and Cosmetic Act (FDCA). This material does not contain reportable amounts of any TSCA 12(b) listed chemicals.
CERCLA:	This material does not contain any CERCLA regulated chemicals.
SARA 302:	This material does not contain any SARA extremely hazardous substances.
SARA 311/312 Hazard Class:	Flammable (gases, aerosols, liquids, or solids).
SARA 313 Chemicals:	This material does not contain any SARA 313 chemicals above de minimus levels.
Hazardous Air Pollutants:	This material does not contain any hazardous air pollutants (HAPS).
California Prop. 65:	This material does not contain any chemicals known to the State of California to cause cancer. This material does not contain any chemicals known to the State of California to cause reproductive effects.
MA Substance List:	This material contains no listed components.
NJ Right to Know:	This material contains no listed components.
PA Right to Know:	This material contains no listed components.
Canada (DSL):	This product is listed in, or complies with, the substance inventory.
Australia (AICS):	This product is listed in, or complies with, the substance inventory.
Japan (ENCS):	This product is listed in, or complies with, the substance inventory.
Philippines (PICCS):	This product is listed in, or complies with, the substance inventory.
Taiwan (TCSI):	This product is listed in, or complies with, the substance inventory. General note: The Taiwanese chemicals regulation requires a phase 1 registration for TCSI-listed or TCSI-compliant substances if imports to Taiwan or manufacturing in Taiwan exceed the trigger quantity of 100 kg/a (for mixtures to be calculated per each ingredient). It is the duty of the importing/manufacturing legal entity to take care of this obligation.

16 OTHER INFORMATION

Revision Date:	11-Aug-2025
Compliance:	This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200
Disclaimer:	This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It

is the user's responsibility to satisfy himself as to the suitableness & completeness of such information for his own particular use.