

**SF99 55G**

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** SF99 55G

**Other means of identification**

**Synonyms:** HO-STOPPED SILSESQUIOXANE FLUID

**Recommended use and restriction on use**

**Recommended use:** Silicone fluid

Mixture

**Restrictions on use:** Not known.

**Manufacturer/Importer/Distributor Information** : Momentive Performance Materials LLC  
260 Hudson River Road  
Waterford NY 12188

**Contact person** : commercial.services@momentive.com

**Telephone** : General information  
+1-800-295-2392

**Emergency telephone number**

**Supplier** : CHEMTRAC  
1-800-424-9300

## 2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**

Flammable liquids Category 3

**Health Hazards**

Toxic to reproduction Category 2

**Label Elements**

**Hazard Symbol:**

**SF99 55G**



**Signal Word:** Warning

**Hazard Statement:** Flammable liquid and vapor.  
Suspected of damaging fertility.

**Target Organs**  
No data available.

**Precautionary Statement**

**Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wear protective gloves. Wear eye protection/face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed.

**Response:** IF exposed or concerned: Get medical advice/attention. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

**Storage:** Store locked up. Store in a well-ventilated place. Keep cool.

**Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** None.

**3. Composition/information on ingredients**

**Mixtures**

Chemical Identity	CAS number	Content in percent (%)*
Octamethylcyclotetrasiloxane	556-67-2	40 - 70%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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**4. First-aid measures**

**Ingestion:** If swallowed, do NOT induce vomiting. Give a glass of water.

**Inhalation:** If inhaled, remove to fresh air. If not breathing give artificial respiration using a barrier device. If breathing is difficult give oxygen. Get medical attention.

**Skin Contact:** Wash area with soap and water.

**Eye contact:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Most important symptoms/effects, acute and delayed**

**Symptoms:** No data available.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** No data available.

**5. Fire-fighting measures**

**General Fire Hazards:** No data available.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media:** All standard extinguishing agents are suitable.

**Unsuitable extinguishing media:** No data available.

**Specific hazards arising from the chemical:** No data available.

**Special protective equipment and precautions for firefighters**

**Special fire fighting procedures:** No data available.

**Special protective equipment for fire-fighters:** Flammable. Firefighters must wear NIOSH/MSHA approved positive pressure self-contained breathing apparatus with full face mask and full protective clothing.

**6. Accidental release measures**

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<b>Personal precautions, protective equipment and emergency procedures:</b>	Avoid contact with skin and eyes. Keep out of reach of children. Keep container tightly closed. Avoid inhalation of vapors and spray mists.
<b>Methods and material for containment and cleaning up:</b>	Wash walking surfaces with detergent and water to reduce slipping hazard. Wear proper protective equipment as specified in the protective equipment section. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal.

**7. Handling and storage**

<b>Precautions for safe handling:</b>	Sensitivity to static discharge is expected; material has a flash point below 200 F.
<b>Conditions for safe storage, including any incompatibilities:</b>	Keep container tightly closed in a cool, well-ventilated place.

**8. Exposure controls/personal protection**

**Control Parameters**

**Occupational Exposure Limits**

None of the components have assigned exposure limits.

**Appropriate Engineering Controls**

No data available.

**Individual protection measures, such as personal protective equipment**

**General information:** Ventilation and other forms of engineering controls are preferred for controlling exposures. Respiratory protection may be needed for non-routine or emergency situations.

**Eye/face protection:** Safety glasses with side shields

**Skin Protection**

**Hand Protection:** No data available.

**Other:** Wear suitable protective clothing and eye/face protection.

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**Respiratory Protection:** If exposure limits are exceeded or respiratory irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Supplied air respirators may be required for non-routine or emergency situations. Respiratory protection must be provided in accordance with OSHA regulations (see 29CFR 1910.134).

**Hygiene measures:** No data available.

**9. Physical and chemical properties**

**Appearance**

<b>Physical state:</b>	liquid
<b>Form:</b>	liquid
<b>Color:</b>	Colorless
<b>Odor:</b>	Odorless
<b>Odor threshold:</b>	No data available.
<b>pH:</b>	not applicable
<b>Melting point/freezing point:</b>	not applicable
<b>Initial boiling point and boiling range:</b>	Unknown
<b>Flash Point:</b>	57.20 °C (Closed Cup)
<b>Evaporation rate:</b>	< 1
<b>Flammability (solid, gas):</b>	No data available.

**Upper/lower limit on flammability or explosive limits**

<b>Flammability limit - upper (%):</b>	
<b>Flammability limit - lower (%):</b>	
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.

**Vapor pressure:** 1.00 hPa

**Vapor density:** No data available.

**Density:** ca. 0.958 g/cm<sup>3</sup>

**Relative density:** 0.97

**Solubility(ies)**

<b>Solubility in water:</b>	Insoluble
<b>Solubility (other):</b>	No data available.

**Partition coefficient (n-octanol/water) Log Pow:** No data available.

**Auto-ignition temperature:** No data available.

**Decomposition temperature:** No data available.

**SADT:** No data available.

**Viscosity, dynamic:** No data available.

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**Viscosity, kinematic:** No data available.

**10. Stability and reactivity**

**Reactivity:** No data available.

**Chemical Stability:** No data available.

**Possibility of hazardous reactions:** Hazardous polymerisation does not occur.

**Conditions to avoid:** Keep away from sources of ignition - No smoking. Keep away from sources of ignition - No smoking.

**Incompatible Materials:** None known.

**Hazardous Decomposition Products:** Carbon dioxide Silicon dioxide. Measurements at temperatures above 150°C in presence of air (oxygen) have shown that small amounts of formaldehyde are formed due to oxidative degradation.

**11. Toxicological information**

**Information on likely routes of exposure**

**Ingestion:** No data available.

**Inhalation:** No data available.

**Skin Contact:** No data available.

**Eye contact:** No data available.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Ingestion:** No data available.

**Inhalation:** No data available.

**Skin Contact:** No data available.

**Eye contact:** No data available.

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

**Oral Product:** 40 mg/kg

**Dermal Product:** None known.

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**Specified substance(s):**

Octamethylcyclotetrasiloxane LD 50 (Rat): > 2,400 mg/kg

**Inhalation Product:** 535 mg/l

**Repeated dose toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** No data available.

**Serious Eye Damage/Eye Irritation**

**Product:** No data available.

**Respiratory or Skin Sensitization**

**Product:** No data available.

**Carcinogenicity**

**Product:** No data available.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

No carcinogenic components identified

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro Product:** No data available.

**In vivo Product:** No data available.

**Reproductive toxicity**

**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**

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**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Target Organs**

No data available.

**Aspiration Hazard**

**Product:** No data available.

**Other effects:**

Octamethylcyclotetrasiloxane (D4) Ingestion: Rodents given large doses via oral gavage of Octamethylcyclotetrasiloxane (1600mg/kg/day,14 days), developed increased liver weights relative to unexposed control animals due to hepatocellular hyperplasia (increased number of liver cells which appear normal) as well as hypertrophy (increased cell size). Inhalation: In inhalation studies, laboratory rodents exposed to Octamethylcyclotetrasiloxane (300 ppm five days/week, 90 days) developed increased liver weights in female animals relative to unexposed control animals. When the exposure was stopped, liver weights returned to normal. Microscopic examination of the liver cells did not show any evidence of pathology. This response in rats, which does not affect the animal's health, is well-documented and widely recognized. It is related to an increase of liver enzymes that metabolize and eliminate a material from the body. The increased liver weight reverses even while the D4 exposure continues. The finding is not adverse, but is considered a natural adaptive change in rats, and does not represent a hazard to humans. Inhalation studies utilizing laboratory rabbits and guinea pigs showed no effects on liver weights. Inhalation exposures typical of industrial usage (5-10 ppm) showed no toxic effects in rodents. Range finding reproductive studies were conducted (whole body inhalation, 70 days prior to mating, through mating, gestation and lactation), with D4. Rats were exposed to 70 and 700 ppm. In the 700 ppm group, there was a statistically significant reduction in mean litter size and in implantation sites. No D4 related clinical signs were observed in the pups and no exposure related pathological findings were found. A two-year, combined chronic/carcinogenicity study, during which rats were exposed to D4 by inhalation, data showed a statistically significant increase in a benign uterine tumor in female rats exposed at the highest level--a level much higher than the low levels that consumers or workers may encounter. An expert panel of independent scientists who have reviewed the results of this research concur that the finding seen in the two-year study occurred through a biological pathway that is specific to the rat and is not relevant to humans. Therefore, this observed effect does not indicate a potential health hazard to humans. In developmental toxicity studies, rats and rabbits were exposed to D4 at concentrations up to 700 ppm and 500 ppm, respectively. No teratogenic effects (birth defects) were observed in either study.

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**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** No data available.

**Specified substance(s):**

Octamethylcyclotetrasiloxane 3.7 % (29 d, 310 Ready Biodegradability - CO<sub>2</sub> in Sealed Vessels (Headspace Test)) Not readily biodegradable.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative Potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available.

**Specified substance(s):**

Octamethylcyclotetrasiloxane Fathead Minnow, Bioconcentration Factor (BCF): 12.40

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**Partition Coefficient n-octanol / water (log Kow)**  
**Product:** No data available.

**Mobility in Soil:** No data available.

**Known or predicted distribution to environmental compartments**  
Octamethylcyclotetrasiloxane No data available.

**Known or predicted distribution to environmental compartments**  
Siloxanes and Silicones, di- No data available.  
Me, polymers with Me  
silsesquioxanes, hydroxy-  
terminated  
Decamethylcyclopentasiloxane No data available.  
ane

**Other Adverse Effects:** No data available.

**13. Disposal considerations**

**Disposal instructions:** Disposal should be made in accordance with federal, state and local regulations.

**Contaminated Packaging:** Dispose of as unused product.

**14. Transport information**

**DOT**

UN Number:	UN 1993
UN Proper Shipping Name:	Flammable liquids, n.o.s.(Octamethylcyclotetrasiloxane)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	III
Marine Pollutant:	No

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**IMDG**

UN Number:	UN 1993
UN Proper Shipping Name:	FLAMMABLE LIQUID, N.O.S.(Octamethylcyclotetrasiloxane)
Transport Hazard Class(es)	
Class:	3
Label(s):	3
EmS No.:	F-E, S-E
Packing Group:	III
Marine Pollutant:	No
Limited quantity	5.00L
Excepted quantity	E1

**IATA**

UN Number:	UN 1993
Proper Shipping Name:	Flammable liquid, n.o.s.(Octamethylcyclotetrasiloxane)
Transport Hazard Class(es):	
Class:	3
Label(s):	3
Packing Group:	III
Cargo aircraft only Packing	366
Instructions:	
Passenger and cargo aircraft	366
Packing Instructions:	
Limited quantity:	10.00L
Packing Instructions:	Y344
Excepted quantity	E1
Environmental Hazards:	Not regulated.
Marine Pollutant:	No
<b>Special precautions for user:</b>	Flammable Keep away from food, foodstuff, acids and bases.

**15. Regulatory information**

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

<u>Chemical Identity</u>	<u>Reportable quantity</u>
Octamethylcyclotetrasiloxane	De minimis concentration: TSCA Section: 4% One-Time Export Notification only.

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**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

<b><u>Chemical Identity</u></b>	<b><u>OSHA hazard(s)</u></b>
Siloxanes and Silicones, di-Me, polymers with Me silsesquioxanes, hydroxy-terminated	No OSHA Hazards
Octamethylcyclotetrasiloxane	Systemic effects
Decamethylcyclopentasiloxane	Causes mild skin irritation.; Respiratory hazard.
Cyclohexasiloxane	No OSHA Hazards
Dodecamethyl-	

**CERCLA Hazardous Substance List (40 CFR 302.4):**

None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Acute Health Hazard  
Fire Hazard  
Fire Hazard  
Delayed (Chronic) Health Hazard

**SARA 302 Extremely Hazardous Substance**

None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**

None present or none present in regulated quantities.

**SARA 311/312 Hazardous Chemical**

<b><u>Chemical Identity</u></b>	<b><u>Threshold Planning Quantity</u></b>
Octamethylcyclotetrasiloxane	10000 lbs

**SARA 313 (TRI Reporting)**

None present or none present in regulated quantities.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**

None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**

None present or none present in regulated quantities.

**US State Regulations**

**US. California Proposition 65**

No ingredient regulated by CA Prop 65 present.

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**US. New Jersey Worker and Community Right-to-Know Act**

No ingredient regulated by NJ Right-to-Know Law present.

**US. Massachusetts RTK - Substance List**

No ingredient regulated by MA Right-to-Know Law present.

**US. Pennsylvania RTK - Hazardous Substances**

No ingredient regulated by PA Right-to-Know Law present.

**US. Rhode Island RTK**

No ingredient regulated by RI Right-to-Know Law present.

**Inventory Status:**

Australia AICS:	y (positive listing)	Remarks: None.
EU EINECS List:	y (positive listing)	Remarks: None.
Japan (ENCS) List:	y (positive listing)	Remarks: None.
China Inventory of Existing Chemical Substances:	y (positive listing)	Remarks: None.
Korea Existing Chemicals Inv. (KECI):	y (positive listing)	Remarks: None.
Canada DSL Inventory List:	y (positive listing)	Remarks: None.
Canada NDSL Inventory:	n (Negative listing)	Remarks: None.
Philippines PICCS:	y (positive listing)	Remarks: None.
US TSCA Inventory:	y (positive listing)	Remarks: On TSCA Inventory
Taiwan. Taiwan inventory (CSNN):	y (positive listing)	Remarks: None.

**16. Other information, including date of preparation or last revision**

**HMIS Hazard ID**

<b>Health</b>	*	1
<b>Flammability</b>		2
<b>Physical Hazards</b>		0
<b>PERSONAL PROTECTION</b>		

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; \*Chronic health effect

**Issue Date:** 05/10/2016

**Revision Date:** No data available.

**Version #:** 1.3

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**Further Information:** No data available.

**Disclaimer:**

**Notice to reader**

Unless otherwise specified in section 1, Momentive products are intended for use in the manufacture and/or formulation of products and are not intended for direct consumer use. These products are not intended for long-lasting (> 30 days) implantation, injection or direct ingestion into the human body, nor for use in the manufacture of multiple use contraceptives.

Keep out of the reach of children.

**Further Information**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.

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