

## 1. Identification

<b>Product identifier</b>	<b>GEC-5</b>
<b>Other means of identification</b>	
<b>Sales Code</b>	1633MW
<b>Recommended use</b>	Fluids, Modified silicone fluids Paint additive , Cosmetic additive , Cleaning agent , Dispersant
<b>Recommended restrictions</b>	Industrial use only.
<b>Manufacturer/Importer/Supplier/Distributor information</b>	
<b>Name</b>	Shin-Etsu Silicones of America, Inc.
<b>Address</b>	1150 Damar Drive, Akron, OH 44305 USA
<b>Contact</b>	Regulation compliance group
<b>Telephone Number</b>	+1-330-630-9860
<b>Fax Number</b>	+1-330-630-9855
<b>Emergency Phone Number</b>	Chemtrec: +1-800-424-9300 (Within US) Chemtrec: +1-703-527-3887 (Outside US)

## 2. Hazard(s) identification

<b>Physical hazards</b>	Flammable liquids	Category 4
<b>Health hazards</b>	Not classified.	
<b>Environmental hazards</b>	Not classified.	
<b>OSHA defined hazards</b>	Not classified.	

\*Hazards not stated here are "Not classified", "Not applicable" or "Classification not possible".

### Label elements

<b>Hazard symbol</b>	None.
<b>Signal word</b>	Warning
<b>Hazard statement</b>	Combustible liquid.
<b>Precautionary statement</b>	
<b>Prevention</b>	Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Wear protective gloves/protective clothing/eye protection/face protection.
<b>Response</b>	In case of fire: Use appropriate media to extinguish.
<b>Storage</b>	Store in a well-ventilated place. Keep cool.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.
<b>Supplemental information</b>	None.
<b>HMIS® ratings</b>	Health: 1 Flammability: 2 Physical hazard: 0

## 3. Composition/information on ingredients

### Substances

Chemical name	Common name and synonyms	CAS number	%
Decamethylcyclopentasiloxane		541-02-6	100

## 4. First-aid measures

<b>Inhalation</b>	Move to fresh air. Call a physician if symptoms develop or persist.
<b>Skin contact</b>	Wash skin with soap and water.

<b>Eye contact</b>	Rinse immediately with plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Get medical attention immediately.
<b>Most important symptoms/effects, acute and delayed</b>	Not available.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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## 5. Fire-fighting measures

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<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
<b>Unsuitable extinguishing media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Specific hazards arising from the chemical</b>	By heating and fire, harmful vapors/gases may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet, gloves, rubber boots, and self-contained breathing apparatus.
<b>Fire-fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Move containers from fire area if you can do so without risk.
<b>General fire hazards</b>	Combustible liquid.

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## 6. Accidental release measures

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<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Wear appropriate personal protective equipment.
<b>Methods and materials for containment and cleaning up</b>	<p>Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.</p> <p>Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills in original containers for re-use.</p>
<b>Environmental precautions</b>	Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

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## 7. Handling and storage

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<b>Precautions for safe handling</b>	Provide adequate ventilation. Keep away from open flames, hot surfaces and sources of ignition. Do not smoke. Use care in handling/storage. Do not breathe mist or vapor.
<b>Conditions for safe storage, including any incompatibilities</b>	Keep away from heat, sparks and open flame. Store in cool place. Store in a well-ventilated place. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Keep in original container.

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## 8. Exposure controls/personal protection

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<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Appropriate engineering controls</b>	Explosion-proof general and local exhaust ventilation. Provide eyewash station.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Tightly sealed safety glasses according to EN 166.
<b>Skin protection</b>	
<b>Hand protection</b>	Wear protective gloves.
<b>Other</b>	Wear suitable protective clothing.

<b>Respiratory protection</b>	No personal respiratory protective equipment normally required.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

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## 9. Physical and chemical properties

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<b>Appearance</b>	
<b>Form</b>	Liquid.
<b>Color</b>	Colorless. Clear.
<b>Odor</b>	Slight odor.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-36.4 °F (-38 °C)
<b>Initial boiling point and boiling range</b>	410 °F (210 °C)
<b>Flash point</b>	170.6 °F (77 °C) Closed Cup
<b>Evaporation rate</b>	< 1 (Butyl Acetate=1)
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	No data
<b>Flammability limit - upper (%)</b>	No data
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	0.13 kPa ( 20 °C )
<b>Vapor density</b>	> 1 (air=1)
<b>Relative density</b>	0.96 ( 25 °C )
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not soluble (<1 ppm)
<b>Partition coefficient (n-octanol/water)</b>	5.2
<b>Auto-ignition temperature</b>	about 400°C (752°F)
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	4 mm <sup>2</sup> /s ( 25 °C )

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## 10. Stability and reactivity

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<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Stable at normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	None known.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

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## 11. Toxicological information

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<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	No significant effects are expected.
<b>Inhalation</b>	No significant effects are expected.
<b>Skin contact</b>	No significant effects are expected.

**Eye contact** May cause transitional slight eyes irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Not available.

**Information on toxicological effects**

**Acute toxicity**

<b>Product</b>	<b>Species</b>	<b>Test Results</b>
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Decamethylcyclopentasiloxane (CAS 541-02-6)

**Acute**

*Inhalation*

LC50	Rat	> 5000 mg/m3/hr (Estimated by similar product)
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*Oral*

LD50	Rat	> 5000 mg/kg
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**Skin corrosion/irritation** Patch Test(24Hr/Open) : Almost negative.

**Serious eye damage/eye irritation** EYE-RABBIT : MILD

**Respiratory or skin sensitization**

**Respiratory sensitization** Not available.

**Skin sensitization** No evidence of sensitization

**Germ cell mutagenicity** Negative(Bacteria)

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

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

Not listed.

**Reproductive toxicity** Not available.

**Specific target organ toxicity - single exposure** Not available.

**Specific target organ toxicity - repeated exposure** Repeated inhalation or oral exposure of mice and rats to decamethylcyclopentasiloxane produced an increase in liver size. No gross histopathological or significant clinical chemistry effects were observed. An increase in liver metabolizing enzymes, as well as a transient increase in the number of normal cells (hyperplasia) followed by an increase in cell size (hypertrophy) were determined to be the underlying causes of the liver enlargement. The biochemical mechanisms producing these effects are highly sensitive in rodents, while similar mechanisms in humans are insensitive.

**Aspiration hazard** Not available.

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## 12. Ecological information

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**Ecotoxicity** No ecotoxicity data noted for the ingredient(s).

**Persistence and degradability** No evidence of biodegradation. Vapor undergoes indirectly photolysis in the troposphere.

**Bioaccumulative potential** May cause bioaccumulation.

**Partition coefficient n-octanol / water (log Kow)**

5.2

**Mobility in soil** Not available.

**Other adverse effects** Not available.

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## 13. Disposal considerations

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**Disposal instructions** Follow applicable Federal, State and Local regulations.

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## 14. Transport information

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**DOT**

**UN number** NA1993

**UN proper shipping name** Combustible liquid, n.o.s.(Decamethylcyclopentasiloxane)

**Transport hazard class(es)**

**Class** Combustible liq

**Subsidiary risk** -

<b>Label(s)</b>	None
<b>Packing group</b>	III
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	IB3, T1, T4, TP1
<b>Packaging exceptions</b>	150
<b>Packaging non bulk</b>	203
<b>Packaging bulk</b>	241

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** This product is not intended to be transported in bulk.

**DOT**




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## 15. Regulatory information

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**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.  
All components are on the U.S. EPA TSCA Inventory List.

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

Not listed.

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

**SARA 313 (TRI reporting)**

**US state regulations**

**US. Massachusetts RTK - Substance List**

Not regulated.

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

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

**Issue date** 12-03-2014

**Version #** 01

**NFPA ratings** Health: 1  
Flammability: 2  
Instability: 0

**NFPA ratings**



**Disclaimer**

This information is offered in good faith as typical values and not as a product specification. No warranty, expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate.

This product has been designed, manufactured and developed solely for general industrial use only. This product is not designed for, intended for use as, or suitable for, medical, surgical or other particular purposes. Users have the sole responsibility and obligation to determine the suitability of this product for any application, to make preliminary tests, and to confirm the safety of this product for their use. Users must never use this product for the purpose of implantation into the human body and/or injection into humans.

**Revision Information**

Composition / Information on Ingredients: Disclosure Overrides  
Physical & Chemical Properties: Multiple Properties  
Toxicological Information: Toxicological Data  
Ecological Information: Ecotox Property Data  
Transport Information: Proper Shipping Name/Packing Group  
Regulatory Information: United States  
HazReg Data: Pacific Rim  
GHS: Classification