Safety Data Sheet

Version 7.0
Revision Date: 11/03/2021

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name:	**Hexamethylcyclotrisiloxane**
Product number:	Hexamethylcyclotrisiloxane
Product use:	For laboratory research purposes.
Supplier / Manufacturer:	Polymer Source, Inc.
Address:	124 Avro street, Dorval (Montreal), Quebec H9P 2X8, Canada
Telephone:	(+1) 514-421-5517
Toll free:	1-866-422-9842
Fax:	(+1) 514-421-5518
Emergency phone:	(+1) 514-887-5517
E-mail:	info@polymersource.com

2. HAZARDS IDENTIFICATION

Emergency overview: GHS classification: Flammable solids (Category 1), H228

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17):

Pictogram:

Signal word: Danger

Hazard statements: H228. Flammable solid.

Precautionary statements:
P210. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240. Ground and bond container and receiving equipment.
P241. Use explosion-proof electrical/ ventilating/ lighting equipment.
P280. Wear protective gloves/ eye protection/ face protection.
P370 + P378. *In case of fire*: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance:	Hexamethylcyclotrisiloxane
Formula:	$C_6H_{18}O_3Si_3$
Molecular weight:	222.46 g/mol

Concentration:	≤ 100 %
CAS registry number:	541-05-9
EC number:	208-765-4

4. FIRST AID MEASURES

General advice:	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled:	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact:	Wash off with soap and plenty of water. Consult a physician.
In case of eye contact:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed:	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special protective equipment for firefighters:	Wear self contained breathing apparatus for firefighting if necessary.
Hazardous combustion products:	Hazardous decomposition products formed under fire conditions: Carbon oxides, Silicon oxides.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up:	Sweep up and shovel. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and place in a container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling:	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – No smoking. Keep away from heat and sources of ignition.

Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place. Moisture sensitive. Storage class (TRGS 510): 4.1B: Flammable solid hazardous materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls:	Handle in accordance with good industrial hygiene and safety practice. Use mechanical exhaust or laboratory fumehood to avoid exposure. Wash hands before breaks and at the end of workday.
Personal protective equipment:	
• Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use a full face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
• Eye protection:	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
• Skin protection:	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
• Body protection:	Flame retardant antistatic protective clothing. Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
• Control of environmental exposure:	Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Form:	Crystalline
	Colour:	Colourless
Safety data:	pH:	no data available
	Melting point / Freezing point:	m.p. (lit.): 50–64 °C
	Boling point:	b.p. (lit.): 134 °C
	Flash point:	closed cup (lit.): 35 °C
	Ignition temperature:	no data available
	Auto-ignition temperature:	386 °C at 1013.0 hPa (lit.)
	Evaporation rate:	no data available
	Flammability:	The substance or mixture is a flammable solid with the category 1.

Lower explosion limit:	no data available
Upper explosion limit:	no data available
Vapour pressure:	no data available
Density:	no data available
Water solubility:	0.0016 g/l at 23 °C (lit.), slightly soluble
Partition coefficient: n-octanol/water:	no data available
Relative vapour density:	no data available
Odour:	no data available
Odour threshold:	no data available
Evaporation rate:	no data available

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	no data available
Conditions to avoid:	Heat, flames and sparks.
Materials to avoid:	Strong oxidizing agents.
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions: Carbon oxides, Silicon oxides. Other decomposition products: no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity:	Oral LD50:	no data available
	Inhalation LC50:	no data available
	Dermal LD50:	no data available
	Other information on acute toxicity:	no data available
Skin corrosion/irritation:	no data available	
Serious eye damage/eye irritation.	no data available	
Respiratory or skin sensitization:	Maximisation Test - Guinea pig Result: Does not cause skin sensitisation. (OECD Test Guideline 406)	
Germ cell mutagenicity:	Ames test S. typhimurium Result: negative	
	Rat - male Result: negative	
Carcinogenicity:	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.

Reproductive toxicity:	no data available	
Teratogenicity:	no data available	
Specific target organ toxicity:	Single exposure (GHS):	no data available
	Repeated exposure (GHS):	no data available
Aspiration hazard:	no data available	
Potential health effects:	no data available	
Signs and symptoms of exposure:	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.	
Synergistic effects:	no data available	
Additional information:	Repeated dose toxicity – Rat: male and female – Inhalation	
	RTECS: not available	

12. ECOLOGICAL INFORMATION

Toxicity:	Toxicity to fish:	flow-through test LC50 - Oncorhynchus mykiss (rainbow trout): >1.6 mg/l - 96 h
	Toxicity to daphnia and other aquatic invertebrates:	flow-through test EC50 - Daphnia magna (Water flea): > 1.6 mg/l - 48 h
	Toxicity to algae:	static test EC50 - Pseudokirchneriella subcapitata: > 1.6 mg/l – 72 h (OECD Test Guideline 201)
	Toxicity to bacteria:	Respiration inhibition EC50 - Sludge Treatment: > 100 mg/l - 3 h (OECD Test Guideline 209)

Persistence and degradability:	Biodegradability:	
	Aaerobic: Exposure time 28 d.	Result: 0.06 % - Not biodegradable (OECD Test Guideline 310)
Bioaccumulative potential:	no data available	
Mobility in soil:	no data available	
PBT and vPvB assessment:	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.	
Other adverse effects:	no data available	

13. DISPOSAL CONSIDERATIONS

Product:	Offer surplus and non-recyclable solutions to a licensed disposal company. Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging:	Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US):	UN number:	1325
	Class:	4.1
	Packing group:	II
	Proper shipping name:	Flammable solids, organic, n.o.s. (Hexamethylcyclotrisiloxane)
	Poison inhalation hazard:	No
IMDG:	UN number:	1325
	Class:	4.1
	Packing group:	II
	EMS-No:	F-A, S-G
	Proper shipping name:	Flammable solids, organic, n.o.s. (Hexamethylcyclotrisiloxane)
IATA:	UN number:	1325
	Class:	4.1
	Packing group:	II
	Proper shipping name:	Flammable solids, organic, n.o.s. (Hexamethylcyclotrisiloxane)

15. REGULATORY INFORMATION

GHS classification: Flammable solids (Category 1), H228.

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

16. OTHER INFORMATION

Date of the latest revision: 11 March 2021

Further information: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Polymer Source, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See www.polymersource.ca for additional terms and conditions of sale.