



Safety Data Sheet

Version 7.0
Revision Date: 27/06/2019

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **Deuterated 1,3,5,7-Octamethyl-d₂₄ cyclotetrasiloxane**
Product abbreviation: D24-D4
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

2.1 Classification of the substance or mixture:

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

Flammable liquids (Category 3), H226;
Acute toxicity, Oral (Category 1), H300;
Acute toxicity, Dermal (Category 1), H310.

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram:



Signal word: Danger

Hazard statements: H226. Flammable liquid and vapour.
H300 + H310. Fatal if swallowed or in contact with skin.

Precautionary statements: P210. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233. Keep container tightly closed.
P240. Ground and bond container and receiving equipment.
P241. Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242. Use non-sparking tools.

P243. Take action to prevent static discharges.

P262. Do not get in eyes, on skin, or on clothing.

P264. Wash skin thoroughly after handling.

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

P280. Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301 + P310 + P330. *IF SWALLOWED:*
Immediately call a POISON CENTER/doctor. Rinse mouth.

P303 + P361 + P353. *IF ON SKIN (or hair):*
Take off immediately all contaminated clothing. Rinse skin with water.

P361 + P364. Take off immediately all contaminated clothing and wash it before reuse.

P370 + P378. In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

P403 + P235. Store in a well-ventilated place. Keep cool.

P405. Store locked up.

P501. Dispose of contents/ container to an approved waste disposal plant.

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

3. COMPOSITION / INFORMATION ON INGREDIENTS

Formula:	Deuterated Octamethylcyclotetrasiloxane-d ₂₄ :	C ₈ D ₂₄ O ₄ Si ₄
Concentration:	≤ 100 %	
CAS registry number:	Octamethylcyclotetrasiloxane-d ₂₄ (<i>labelled</i>):	n/a
	Octamethylcyclotetrasiloxane (<i>unlabelled</i> , C ₈ H ₂₄ O ₄ Si ₄):	556-67-2

4. FIRST AID MEASURES

4.1 Description of 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: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed: no data available

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.
Explosion data:	Sensitivity to mechanical impact: no data available Sensitivity to static discharge: no data available
Further information:	Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. <i>For personal protection see section 8.</i>
Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods and materials for containment and cleaning up:	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).
Reference to other sections:	For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling:	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition: No smoking. Take measures to prevent the build up of electrostatic charge. <i>For precautions see section 2.2.</i>
Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Storage class (TRGS 510): 3: Flammable liquids.
Specific end use(s):	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure controls	
Appropriate engineering controls:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
Personal protective equipment:	

- Eye/face 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: Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) 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).
- Hand 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.
- Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Form:	Liquid
	Colour:	no data available
Safety data:	pH:	no data available
	Melting point / Freezing point:	no data available
	Boling point:	no data available
	Flash point:	no data available
	Ignition temperature:	no data available
	Auto-ignition temperature:	no data available
	Lower explosion limit:	no data available
	Upper explosion limit:	no data available
	Vapour pressure:	no data available
	Density:	no data available
	Water solubility:	no data available
	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.
Radioactivity:	Stable isotope compound. Not radioactive.
Possibility of hazardous reactions:	no data available
Conditions to avoid:	Heat, flames and sparks.
Materials to avoid:	Strong oxidizing agents, Acids, Bases.
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions: Carbon oxides, Silicon oxides. Other decomposition products: no data available. <i>In the event of fire: see section 5.</i>

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:	no data available	
Germ cell mutagenicity:	no data available	
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.
	ACGIH:	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
Reproductive toxicity:	Suspected of damaging fertility	
Teratogenicity:	no data available	
Specific target organ toxicity:	Single exposure (Globally Harmonized System):	no data available
	Repeated exposure (Globally Harmonized System):	no data available
Aspiration hazard:	no data available	

Additional information: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
We have no description of any toxic symptoms.
Handle in accordance with good industrial hygiene and safety practice.

12. ECOLOGICAL INFORMATION

Toxicity: no data available
Persistence and degradability: no data available
Bioaccumulative potential: no data available
Mobility in soil: no data available
PBT and vPvB assessment: no data available
Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Not readily biodegradable.
Discharge into the environment must be avoided.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

TDG (Canada): UN number: 1993
Class: 3
Packing group: III
Proper shipping name: FLAMMABLE LIQUID, N.O.S.
(Octamethylcyclotetrasiloxane-d24)
IMDG: UN number: 1993
Class: 3
Packing group: III
EMS-No: F-E, S-E
Proper shipping name: FLAMMABLE LIQUID, N.O.S.
(Octamethylcyclotetrasiloxane-d24)
IATA: UN number: 1993
Class: 3
Packing group: III
Proper shipping name: FLAMMABLE LIQUID, N.O.S.
(Octamethylcyclotetrasiloxane-d24)

15. REGULATORY INFORMATION

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

Full text of H-Statements referred to under sections 2 and 3:	Aquatic Chronic: Chronic aquatic toxicity. Flam. Liq.: Flammable liquids. H226: Flammable liquid and vapour. H300: Fatal if swallowed. H310: Fatal in contact with skin. H361: Suspected of damaging fertility or the unborn child. H413: May cause long lasting harmful effects to aquatic life.
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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.