



Safety Data Sheet

Version 8.0
Revision Date: 30/08/2021

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

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| Product name: | Deuterated poly(dimethylsiloxane-d₆), α,ω-bis(silanol)-terminated |
| Product abbreviation: | dPDMS |
| 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

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| Classification of the substance or mixture | Not a hazardous substance or mixture. |
| GHS Label elements, including precautionary statements | Not a hazardous substance or mixture. |
| Hazards not otherwise classified (HNOC) or not covered by GHS | None |

3. COMPOSITION / INFORMATION ON INGREDIENTS

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| Formula: | Poly(dimethylsiloxane-d ₆): | [Si(CD ₃) ₂ O] _n |
| Synonym: | Deuterated dimethylpolysiloxane, d ₆ -labeled PDMS | |
| Concentration: | ≤ 100% | |
| CAS registry number: | Poly(dimethylsiloxane-d ₆), <i>labeled PDMS</i> : | n/a |
| | Poly(dimethylsiloxane), <i>unlabeled PDMS</i> [Si(CH ₃) ₂ O] _n : | 63148-62-9 |

4. FIRST AID MEASURES

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| General advice: | Consult a physician. Show this safety data sheet to the doctor in attendance. |
| 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. |

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| If swallowed: | Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. |
| Most important symptoms and effects, both acute and delayed | The most important known symptoms and effects are described in section 2.2 and/or in section 11. |
| Indication of any immediate medical attention and special treatment needed | No data available |

5. FIRE-FIGHTING MEASURES

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| 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 |

6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions: | Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. For personal protection see section 8. |
| 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: | Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. |

7. HANDLING AND STORAGE

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| Precautions for safe handling: | Avoid contact with skin and eyes. Avoid formation of dust or mist. For precautions see section 2.2. |
| 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): 10: Combustible 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

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| Personal protective equipment: | |
| <ul style="list-style-type: none"> Respiratory protection: | Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose 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.
- Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- Skin and body protection: Wear impervious clothing. 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: 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

| | | |
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| Appearance: | Form: | Viscous liquid |
| | Colour: | Colourless |
| 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

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| Chemical stability: | Stable under recommended storage conditions. |
| Radioactivity: | Stable isotope compound. Not radioactive. |
| Possibility of hazardous reactions: | no data available |
| Conditions to avoid: | no data available |
| Materials to avoid: | Acids, bases. |

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| Hazardous decomposition products: | Hazardous decomposition products formed under fire conditions: Carbon oxides, Silicon oxides. |
| | Other decomposition products: no data available. |
| Thermal decomposition: | no data available |

11. TOXICOLOGICAL INFORMATION

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| 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: | no data available | |
| 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 | |
| Potential health effects: | Inhalation: | May be harmful if inhaled. May cause respiratory tract irritation. |
| | Ingestion: | May be harmful if swallowed. |
| | Skin: | May be harmful if absorbed through skin. May cause skin irritation. |
| | Eyes: | May cause eye irritation. |
| 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: | RTECS: | no data available |

12. ECOLOGICAL INFORMATION

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| Toxicity: | no data available |
| Persistence and degradability: | no data available |
| Bioaccumulative potential: | no data available |

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| 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. Toxic to aquatic life with long lasting effects. No data available. |

13. DISPOSAL CONSIDERATIONS

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| Product: | 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

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| DOT (US): | Not dangerous goods. |
| IMDG: | Not dangerous goods. |
| IATA: | Not dangerous goods. |

15. REGULATORY INFORMATION

WHMIS classification: Not rated.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. OTHER INFORMATION

Date of the latest revision: 30 August 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.