

Issue Date: 06-Oct-2021

Revision Date: 06-Oct-2021

Version 1

Safety Data Sheet

1. IDENTIFICATION

<u>Product identifier</u> Product Name	Graphene Coating 10H	
Other means of identification SDS #	SYM-006	
UN/ID No	UN1139	
Recommended use of the chemical Recommended Use	and restrictions on use Coating.	
Details of the supplier of the safety data sheet Supplier Address Symplex International LLC		
10975 East 55th Avenue Unit E		

10975 East 55th Avenue Unit I Denver, CO 80239 Ph: 720-808-0785

Emergency telephone number Emergency Telephone

INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Colorless - Black liquid

Physical state Liquid

Odor Characteristic

Classification

The classification and labeling information in this Safety Data Sheet should be viewed as provisional, as physical test data has not been performed. This SDS was created using the criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) and is compliant with the Globally Harmonized System of Labeling and Classification of Chemicals (GHS).

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Reproductive toxicity	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 3

Signal Word Danger

Hazard statements

Harmful if swallowed Causes skin irritation Causes serious eye damage Suspected of damaging fertility or the unborn child May be fatal if swallowed and enters airways Flammable liquid and vapor



Precautionary Statements - Prevention

Obtain special instructions before use Do not handle until all safety precautions have been read and understood Use personal protective equipment as required Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment Use only non-sparking tools Take precautionary measures against static discharge Use explosion-proof equipment

Precautionary Statements - Response

If exposed or concerned: Get medical advice/attention IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing Immediately call a poison center or doctor/physician IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse If skin irritation occurs: Get medical advice/attention Rinse mouth IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomiting In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

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

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Very toxic to aquatic life with long lasting effects

Unknown Acute Toxicity

Note: Acute Toxicity classifications / calculations are approximates, due to proprietary ingredient percentages

3. COMPOSITION/INFORMATION ON INGREDIENTS

Please also refer to subsequent sections of this SDS for additional information regarding the components of this product.

Chemical name	CAS No	Weight-%
Octamethylcyclotetrasiloxane	556-67-2	Proprietary
Cyclosilazanes	475645-84-2	Proprietary
Trimethylated Silica	68988-56-7	Proprietary
Polydimethylsiloxane	63148-62-9	Proprietary
Decamethylcyclopentasiloxane	541-02-6	Proprietary
Petroleum Distillates, Hydrotreated light	64742-47-8	Proprietary
Dimethylmethyl 3,3,3-trifluoropropyl siloxane	115361-68-7	Proprietary

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.
Skin Contact	Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation persists, call a physician.
Inhalation	Remove exposed individual(s) to fresh air for 20 minutes. Consult a physician/poison center if individual's condition declines or if symptoms persist.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Immediate medical attention is required.

Most important symptoms and effects, both acute and delayed

Symptoms	Causes skin irritation and serious eye damage. Harmful if swallowed. May be harmful in
	contact with skin. Aspiration hazard: if swallowed can enter lungs and cause damage.

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Provide general supportive measures and treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Dry chemical or CO2. Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Flammable liquid and vapor. Container explosion may occur under fire conditions. Use water spray to keep containers cool.

Hazardous combustion products Carbon oxides.

Sensitivity to Static Discharge Flammable mixtures of this product are readily ignited even by static discharge.

<u>Protective equipment and precautions for firefighters</u> As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

	6. ACCIDENTAL RELEASE MEASURES
Personal precautions, protective e	equipment and emergency procedures
Personal Precautions	Wear protective clothing as described in Section 8 of this safety data sheet. Remove all sources of ignition. Ventilate area of leak or spill.
For Emergency Responders	Evacuate unprotected personnel from area.
Environmental precautions	
Environmental precautions	Prevent runoff from entering drains, sewers or streams. See Section 12 for additional Ecological Information.
Methods and material for containn	nent and cleaning up
Methods for Containment	Prevent further leakage or spillage if safe to do so. Absorb spill with inert material (e.g. dry sand or earth).
Methods for Clean-Up	Reclaim where possible. Use non-sparking hand tools and explosion-proof electrical equipment. Sweep up and shovel into suitable containers for disposal. For waste disposal, see section 13 of the SDS.
	7. HANDLING AND STORAGE
Precautions for safe handling	
Advice on Safe Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing and eye/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only in well-ventilated areas. Wash face, hands and any exposed skin thoroughly after handling. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Ground/bond container and receiving equipment. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Contaminated work clothing must not be allowed out of the workplace.
Conditions for safe storage, inclue	any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Store away from heat and incompatible materials.
Incompatible Materials	Strong oxidizing agents.
8. EX	(POSURE CONTROLS/PERSONAL PROTECTION
Exposure Guidelines	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Controls Ensure that eyewash stations and safety showers are close to the workstation location.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Chemical safety goggles/faceshield. Refer to 29 CFR 1910.133 for eye and face protection regulations.	
Skin and Body Protection	Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Reference Wiley's "Quick Selection Guide to Chemical Protective Clothing". Refer to 29 CFR 1910.138 for appropriate skin and body protection.	
Respiratory Protection	If necessary, wear a MSHA/NIOSH-approved respirator. Refer to 29 CFR 1910.134 for respiratory protection requirements.	
General Hygiene Considerations Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.		

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Color	Liquid Colorless - Black liquid Colorless - Black
Property_	<u>Values</u>
pH	Not determined
Melting point / freezing point	Not determined
Boiling point / boiling range	Not determined
Flash point	>73 °F
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Flammability Limit in Air	
Upper flammability or explosive	Not determined
limits	
Lower flammability or explosive	Not determined
limits	
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	Not determined
Water Solubility	Not determined
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

Odor Ch Odor Threshold No

Characteristic Not determined

Remarks • Method

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Heat, flames and sparks. Avoid direct sunlight.

Incompatible materials Strong oxidizing agents.

<u>Hazardous decomposition products</u> Thermal decomposition may produce oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Causes serious eye damage.
Skin Contact	May be harmful in contact with skin. Prolonged contact may cause redness and irritation.
Inhalation	May cause irritation if inhaled.
Ingestion	May be fatal if swallowed and enters airways.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Octamethylcyclotetrasiloxane 556-67-2	= 1540 mg/kg (Rat)	> 2375 mg/kg (Rat)	= 36 g/m³(Rat)4 h
Polydimethylsiloxane 63148-62-9	> 24 g/kg (Rat)	-	-
Decamethylcyclopentasiloxane 541-02-6	> 24134 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Petroleum Distillates, Hydrotreated light 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat)4 h

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Please see section 4 of this SDS for symptoms.	
Delayed and immediate effects as well as chronic effects from short and long-term exposure		
Carcinogenicity	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.	
Reproductive toxicity	Suspected of damaging fertility or the unborn child.	
Aspiration hazard	May be fatal if swallowed and enters airways.	

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Unknown Acute Toxicity	Note: Acute Toxicity classifications / calculations are approximates, due to proprietary
	ingredient percentages.
Oral LD50	1,939.50 mg/kg
Dermal LD50	2,401.00 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Octamethylcyclotetrasiloxane		1000: 96 h Lepomis macrochirus	
556-67-2		mg/L LC50	
		500: 96 h Brachydanio rerio mg/L	
		LC50	
Petroleum Distillates, Hydrotreated		2.2: 96 h Lepomis macrochirus mg/L	
light		LC50 static	
64742-47-8		2.4: 96 h Oncorhynchus mykiss	
		mg/L LC50 static	
		45: 96 h Pimephales promelas mg/L	
		LC50 flow-through	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

<u>Mobility</u>

Chemical name	Partition coefficient
Octamethylcyclotetrasiloxane	5.1
556-67-2	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT	
ι	JN/ID No
F	Proper Shipping Name
H	lazard class
F	Packing Group
ι	JN number
_	

UN number	UN1139
Proper Shipping Name	Coating solution
Transport hazard class(es)	3
Packing Group	III

UN1139 Coating solution

3 |||

IMDG	
UN number	UN1139
Proper Shipping Name	Coating solution
Transport hazard class(es)	3
Packing Group	III
Marine Pollutant	Yes

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Octamethylcyclotetrasiloxan e	X	ACTIVE	х	X	Х	X	Х	X	Х
Cyclosilazanes	X	ACTIVE	Х						
Polydimethylsiloxane	X	ACTIVE	Х			Х	Х	Х	Х
Trimethylated Silica	X	ACTIVE	Х	X	Х	X	Х	Х	Х
Decamethylcyclopentasiloxa ne	X	ACTIVE	Х	X	х	X	X	X	X
Petroleum Distillates, Hydrotreated light	X	ACTIVE	Х	X		X	Х	X	Х
Dimethylmethyl 3,3,3- trifluoropropyl siloxane	X	ACTIVE	Х		Х	X			

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

<u>SARA 313</u>

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

16. OTHER INFORMATION

<u>NFPA</u>	Health Hazards		
<u>HMIS</u>	Health Hazards Not determined		
Issue Date:	06-Oct-2021		

Revision Date:06-Oct-2021Revision Note:New product

Flammability Not determined Flammability Not determined Instability Not determined Physical hazards Not determined Special Hazards Not determined Personal Protection Not determined

Disclaimer

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.

End of Safety Data Sheet