ChemicalStore.com

SAFETY DATA SHEET

Product: GraphiSil 350 (Product Code: GraphiSil350)

Version: 1.0 (US) Preparation date: 04/21/2026

1. Identification of the Substance / Preparation and of the Company

1.1 Product Identifier

Trade Name	GraphiSil 350
Product Code / SKU	GraphiSil350
Amazon ASIN	B0GXGLTTD2
Amazon FNSKU	X0052WL231
Product Type	Graphite-silicone conductive lubricating fluid (mixture)
Net Weight / Volume	15 mL

1.2 Relevant identified uses of the substance or mixture

Identified uses: Conductive and lubricating fluid for general industrial, laboratory, maintenance, and hobby applications. Provides lubrication with anti-friction and mild electrical-contact-enhancing properties.

Uses advised against: Not intended for food, drug, cosmetic, pharmaceutical, or medical use. Not for use inside the human body or in contact with bodily fluids or mucosa.

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer / Supplier	Chemical Store Inc.
Address	1059 Main Avenue, Clifton, NJ 07011, USA
Telephone	(973) 405-6248
Fax	(973) 272-1073
Website	www.ChemicalStore.com
Hours of Operation	Monday – Friday, 10:00 AM – 5:00 PM (EST)

1.4 Emergency Telephone Number

Emergency (24h): (973) 420-4972

Transportation emergency (CHEMTREC, USA): (800) 424-9300

Transportation emergency (CHEMTREC, International): +1 (703) 527-3887

2. Hazards Identification

2.1 Classification of the substance or mixture

GHS classification in accordance with OSHA Hazard Communication Standard (29 CFR 1910.1200):

Not classified as a hazardous substance or mixture.

Rationale: The product is a viscous liquid mixture in which graphite powder is fully dispersed within a high-molecular-weight polydimethylsiloxane matrix. Airborne particulate generation under normal conditions of use is

not expected. Concentrations of classified impurities (e.g., naturally occurring crystalline silica within the graphite component) fall below GHS generic cut-off values for mixture classification.

2.2 Label elements

GHS labelling: Not required.

Signal word: None.

Hazard statements: None.

Precautionary statements (advisory, good-practice):

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

P264 – Wash thoroughly after handling.

P501 – Dispose of contents/container in accordance with local, state, and federal regulations.

2.3 Other hazards

Slip hazard: Spilled product may create a slippery surface. Clean up spills promptly.

Electrical conductivity: Product contains graphite and is electrically conductive. Avoid contact with energized electrical circuitry.

Endocrine disrupting properties: The mixture does not contain components considered to have endocrine disrupting properties at levels of 0.1% or higher.

PBT / vPvB: The mixture does not meet PBT or vPvB criteria.

3. Composition / Information on Ingredients

3.1 Mixture

Chemical nature: Mixture of polydimethylsiloxane (silicone fluid) and natural micronized flake graphite.

Component	CAS No.	EC No.	Concentration (w/w)	GHS Classification (pure)
Polydimethylsiloxane (silicone fluid, 350 cSt)	63148-62-9	613-156-5	87%	Not classified
Graphite, natural (micronized flake)	7782-42-5	231-955-3	13%	Not classified (substance)
Crystalline silica (quartz) – impurity within graphite component	14808-60-7	238-878-4	< 0.6% (max)	STOT RE 2, H373 (respirable form)

Notes:

• Crystalline silica is present only as a naturally occurring trace impurity within the graphite component. The graphite is fully wetted and dispersed in the silicone matrix; respirable dust is not generated under normal conditions of use.

• The concentration of crystalline silica in the final mixture (< 0.6% w/w worst case) is below the GHS generic concentration limit (≥ 1.0%) required to classify the mixture for STOT RE.

• This product does not contain substances of very high concern (SVHC) at or above 0.1% w/w.

4. First-Aid Measures

4.1 Description of first-aid measures

General: Get medical attention if irritation develops or persists. Remove contaminated clothing. When seeking medical attention, bring a copy of this Safety Data Sheet.

Inhalation	**Inhalation is not an expected route of exposure due to the liquid nature of the product. If mists or vapors from heated product are inhaled, move to fresh air. Seek medical attention if symptoms occur.**
Skin contact	Wipe off excess material with a clean cloth or paper. Wash skin thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation develops.
Eye contact	Immediately hold eyelids apart and flush eyes with plenty of clean water for at least 15 minutes. Remove contact lenses, if present, after the first 5 minutes. Get medical attention if irritation persists.
Ingestion	Do not induce vomiting. Rinse mouth with water. Give one or two glasses of water to drink if conscious. Never give anything by mouth to an unconscious person. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

No significant symptoms or effects are expected from normal handling of small consumer quantities. Mechanical irritation of the eyes from particulate content is possible on direct contact.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. No specific antidote required.

5. Fire-Fighting Measures

5.1 Extinguishing media

Suitable: Carbon dioxide, dry chemical, alcohol-resistant foam, water mist, sand.

Unsuitable: Direct water jet or water spray (may spread burning material).

5.2 Special hazards arising from the substance or mixture

The product does not present any unusual fire or explosion hazards under normal conditions. Flash point of the silicone base is > 260 °C (500 °F). The product is classified as NFPA Class IIIB combustible liquid.

Hazardous decomposition products in fire: carbon monoxide, carbon dioxide, formaldehyde (trace), silicon dioxide, and incompletely burned hydrocarbons.

5.3 Advice for fire-fighters

Wear full protective clothing including a self-contained breathing apparatus (SCBA) operated in positive-pressure mode. Cool endangered containers with water spray. Prevent fire-fighting run-off from entering drains or waterways.

5.4 NFPA Hazard Ratings

Health	**1**
Flammability	1

Reactivity	0
Special	None

6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Indicate risk of slipping. Do not walk through spilled material. Wear safety glasses and chemical-resistant gloves. Ensure adequate ventilation. Keep unnecessary personnel away.

HAZWOPER PPE Level: D

6.2 Environmental precautions

Prevent material from entering surface waters, drains, sewers, and soil. Contain any free-flowing material using suitable absorbent (e.g., earth, vermiculite, diatomaceous earth). Close leak at source if safe to do so.

Spills of material which could reach surface waters must be reported to the U.S. Coast Guard National Response Center: (800) 424-8802.

6.3 Methods and material for containment and cleaning up

Small spills: Absorb with inert material (diatomaceous earth, sand, vermiculite). Collect into suitable container for disposal. Clean residual slippery film with a detergent or biodegradable cleaner. Apply sand or other granular material to affected pedestrian surfaces to restore traction.

Large spills: Contain and pump into suitable containers. Dispose of in accordance with applicable local, state, and federal regulations.

6.4 Reference to other sections

See Sections 8, 13.

7. Handling and Storage

7.1 Precautions for safe handling

Use in accordance with good industrial hygiene and safety practice. Avoid contact with eyes, skin, and clothing. Do not eat, drink, smoke, or apply cosmetics while handling. Wash thoroughly after handling.

Slip hazard: Spilled product reduces traction on pedestrian surfaces. Use warning labels on consumer applications where traction is essential for safety.

Electrical conductivity: The product contains graphite and is electrically conductive. Do not apply to energized electrical circuitry. Keep away from electronic devices sensitive to particulate contamination.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed. Store in a cool, dry place away from direct sunlight. Maximum recommended storage temperature: 50 °C (122 °F). Store away from strong oxidizing agents.

7.3 Specific end uses

Consumer / industrial lubricating and conductive fluid applications. See Section 1.2.

8. Exposure Controls / Personal Protection

8.1 Control parameters

Occupational exposure limits (applicable only to dust/mist, not to the bulk liquid product):

Component	CAS No.	Authority	Value
Polydimethylsiloxane	63148-62-9	—	No occupational exposure limit established
Graphite (all forms other than fibrous)	7782-42-5	ACGIH TLV-TWA	2 mg/m³ (respirable fraction)
Crystalline silica (quartz) – impurity	14808-60-7	ACGIH TLV-TWA / OSHA PEL	0.025 mg/m³ (respirable) / 0.05 mg/m³ (respirable)

8.2 Exposure controls

Engineering controls:

Use with adequate general ventilation. Local exhaust is not normally required for handling of small consumer quantities.

Personal protective equipment (PPE):

Respiratory protection	Not normally required. If mists or aerosols are generated, wear an approved N95 particulate respirator.
Hand protection	Liquid-tight rubber, nitrile, or vinyl gloves.
Eye protection	Safety glasses with side shields.
Skin / body protection	Standard work clothing. Launder soiled clothing before reuse.

General hygiene measures: Do not eat, drink, smoke, or apply cosmetics in work areas. Wash hands after handling. Remove contaminated clothing and wash before reuse.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance / physical state	Viscous liquid / paste
Color	Dark gray to black
Odor	Odorless
Odor threshold	Not applicable
pH	Not applicable (insoluble in water)
Melting / freezing point	Approximately −50 to −35 °C (−58 to −31 °F) — silicone base
Boiling point / boiling range	Not determinable
Flash point	> 260 °C (> 500 °F) (ISO 2719, inherited from silicone base)
Evaporation rate	Not applicable
Flammability (solid, gas)	Not applicable (liquid)
Upper / lower explosion limit	Not applicable
Vapor pressure	Not applicable (non-volatile)

Vapor density	Not applicable
Relative density	≈ 1.14 g/cm³ at 25 °C (calculated)
Solubility in water	Practically insoluble
Partition coefficient n-octanol/water	No data available
Auto-ignition temperature	> 410 °C (> 770 °F) (silicone base)
Decomposition temperature	> 250 °C (> 482 °F)
Viscosity, kinematic	Approximately 350 mm²/s at 25 °C (silicone base, modified by graphite loading)
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing

9.2 Other information

NFPA Hazard Class (combustible/flammable liquid): IIIB

10. Stability and Reactivity

10.1 Reactivity

The product is not reactive under normal conditions of use and storage.

10.2 Chemical stability

Stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur. No hazardous reactions expected under normal conditions.

10.4 Conditions to avoid

Temperatures exceeding 250 °C (482 °F). Contact with ignition sources. Contact with energized electrical circuitry.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Thermal decomposition above ~250 °C may produce: carbon monoxide, carbon dioxide, silicon dioxide, formaldehyde (trace), and other incompletely combusted hydrocarbons.

11. Toxicological Information

11.1 Information on toxicological effects

Toxicological data for the mixture are not available. The following data refer to the components.

Acute toxicity:

Endpoint	Value	Species	Source
Oral LD50 (polydimethylsiloxane)	> 5,000 mg/kg	Rat	Literature
Dermal LD50 (polydimethylsiloxane)	> 2,008 mg/kg	Rat	Literature
Oral LD50 (graphite, natural)	> 2,000 mg/kg (OECD 423)	Rat	Literature
Inhalation LC50 (graphite, natural)	> 2,000 mg/m³ (OECD 403)	Rat	Literature

Skin corrosion / irritation: Not irritating (OECD 404, rabbit; data for both components).

Serious eye damage / irritation: Not irritating (OECD 405, rabbit; data for both components).

Respiratory or skin sensitization: Not sensitizing (OECD 406 / 429; data for both components).

Germ cell mutagenicity: Negative (OECD 471, 473, 476; data for both components).

Carcinogenicity: The product as a whole is not classified as a carcinogen. No component of this product at concentrations ≥ 0.1% is identified as a known or anticipated carcinogen by NTP. No component at concentrations ≥ 0.1% is classified as a probable, possible, or confirmed human carcinogen by IARC (based on the non-respirable form of the silica impurity in the liquid matrix). No component is classified as a carcinogen by OSHA.

Reproductive toxicity: Not classified. NOAEL (developmental) ≥ 1,000 mg/kg bw; NOAEL (maternal) ≥ 1,000 mg/kg bw (rabbit, polydimethylsiloxane).

STOT — single exposure: Not classified.

STOT — repeated exposure: Not classified as a mixture. The crystalline silica impurity within the graphite component, if airborne in respirable form over extended periods, may cause silicosis. In the present product, graphite is fully wetted and dispersed in a silicone fluid matrix; respirable dust is not generated under normal conditions of use.

Aspiration hazard: Not classified.

Endocrine disrupting properties: The mixture does not contain endocrine disruptors at ≥ 0.1%.

12. Ecological Information

12.1 Toxicity

Both components of the mixture are considered to present low hazard to aquatic organisms based on their physical-chemical properties (insoluble in water, non-bioavailable).

Endpoint	Species	Value	Source
Acute fish toxicity, 96 h LC50 (graphite)	Fish	> 100 mg/L (OECD 203)	Literature
Acute Daphnia toxicity, 48 h EC50 (graphite)	Daphnia magna	> 100 mg/L (OECD 202)	Literature
Acute algae toxicity, 72 h EC50 (graphite)	Algae	> 100 mg/L (OECD 201)	Literature
Acute fish toxicity, 96 h LL50 (PDMS)	Fish	> 1,000 mg/L (WAF)	Literature

12.2 Persistence and degradability

Polydimethylsiloxane: Not readily biodegradable; elimination by adsorption to activated sludge.

Graphite: Inert elemental carbon; not biodegradable; stable in the environment.

12.3 Bioaccumulative potential

No bioaccumulation expected for either component.

12.4 Mobility in soil

Both components are insoluble in water and exhibit low mobility in soil.

12.5 Results of PBT and vPvB assessment

The mixture does not meet PBT or vPvB criteria.

12.6 Other adverse effects

None known. No ozone depletion potential.

13. Disposal Considerations

13.1 Waste treatment methods

Product: Dispose of unused product at an approved waste facility in accordance with applicable local, state, and federal regulations. Do not dispose of in drains, sewers, or surface waters.

Contaminated packaging: Empty containers completely. Containers may be recycled or disposed of in accordance with local regulations. Observe all applicable regulations.

14. Transport Information

This product is not classified as a dangerous good for transport.

Regulation	Classification
US DOT (49 CFR)	Not regulated
Canada TDG	Not regulated
IMDG (Sea)	Not regulated
IATA / ICAO (Air)	Not regulated

UN Number	None
UN Proper Shipping Name	Not applicable
Transport Hazard Class(es)	Not applicable
Packing Group	Not applicable
Environmental Hazards	Not a marine pollutant
Special Precautions for User	None
Transport in Bulk	Not applicable (consumer product)

15. Regulatory Information

15.1 U.S. Federal regulations

TSCA Inventory Status	All components are listed on or are in compliance with the TSCA Chemical Substance Inventory.
TSCA 12(b) Export Notification	Not applicable.
CERCLA Regulated Chemicals	Does not contain CERCLA regulated chemicals above de minimis levels.
SARA 302 Extremely Hazardous Substances	Does not contain SARA 302 substances.
SARA 311/312 Hazard Categories	No SARA hazards.
SARA 313 Toxic Chemicals	Does not contain SARA 313 chemicals above de minimis levels.
HAPs (Hazardous Air Pollutants)	Does not contain listed HAPs.
OSHA HCS 29 CFR 1910.1200	Not classified as hazardous.

15.2 U.S. State regulations

California Proposition 65	This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm at levels requiring warning.
Massachusetts Substance List	Does not contain listed components.
Pennsylvania Right-to-Know	Does not contain listed components.
New Jersey Right-to-Know	Contains: polydimethylsiloxane (CAS 63148-62-9), graphite (CAS 7782-42-5).

15.3 International inventory status

United States (TSCA)	Listed / compliant
Canada (DSL)	Listed / compliant
European Union (REACH)	Polydimethylsiloxane registered; graphite exempt per Annex V
Australia (AIIC)	Listed / compliant
China (IECSC)	Listed / compliant
Japan (ENCS)	Listed / compliant
South Korea (K-REACH)	Listed / compliant
Philippines (PICCS)	Listed / compliant
New Zealand (NZIoC)	Listed / compliant
Taiwan (TCSI)	Listed / compliant

16. Other Information

16.1 Revision information

Version	1.0 (US)

Preparation date	04/21/2026
Date of last alteration	04/21/2026
Revisions	Initial issue

16.2 Abbreviations and acronyms

ACGIH — American Conference of Governmental Industrial Hygienists
CAS — Chemical Abstracts Service
CERCLA — Comprehensive Environmental Response, Compensation, and Liability Act
DOT — U.S. Department of Transportation
EC — European Community
GHS — Globally Harmonized System of Classification and Labelling of Chemicals
HAPs — Hazardous Air Pollutants
IATA — International Air Transport Association
IMDG — International Maritime Dangerous Goods Code
LC50 — Median Lethal Concentration
LD50 — Median Lethal Dose
NFPA — National Fire Protection Association
NOAEL — No Observed Adverse Effect Level
OECD — Organisation for Economic Co-operation and Development
OSHA — Occupational Safety and Health Administration
PBT — Persistent, Bioaccumulative, and Toxic
PDMS — Polydimethylsiloxane
PEL — Permissible Exposure Limit
SARA — Superfund Amendments and Reauthorization Act
SDS — Safety Data Sheet
STOT RE — Specific Target Organ Toxicity, Repeated Exposure
TLV-TWA — Threshold Limit Value, Time-Weighted Average
TSCA — Toxic Substances Control Act
vPvB — very Persistent, very Bioaccumulative

16.3 Disclaimer

This Safety Data Sheet (SDS) meets the requirements of the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and is provided in compliance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

The information contained herein relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. This information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty, or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy themselves as to the suitability and completeness of such information for their own particular use. Chemical Store Inc. does not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents.

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— End of Safety Data Sheet —