



SAFETY DATA SHEET (SDS)

GRAPHITE DRILLING GRADE

Natural Graphite Powder for Drilling Fluids

Manufacturer & Supplier: BASEKIM
Country of Origin: Türkiye

SDS Format: 16-Section Safety Data Sheet

Product Use: Drilling Fluid Additive / Solid Lubricant / Bridging & Lost Circulation Material

SECTION 1: IDENTIFICATION

Item	Information
Product Name	Graphite Drilling Grade
Other Names	Natural Graphite, Graphite Powder, Drilling Graphite
Chemical Name	Graphite / Carbon
CAS No.	7782-42-5
Chemical Formula	C
Recommended Use	Drilling Fluid Additive
Main Applications	Solid Lubricant, Bridging Material, LCM
Supplier / Manufacturer	BASEKIM
Country	Türkiye

Uses advised against:

Any application outside recommended industrial use without appropriate technical and safety evaluation.



SECTION 2: HAZARDS IDENTIFICATION

Classification

Based on available information, the product is not expected to be classified as hazardous under normal conditions of industrial use.

However, handling of the powder may generate airborne dust.

Potential Hazards

- Dust may cause temporary mechanical irritation to eyes.
- Prolonged or excessive inhalation of dust should be avoided.
- Repeated contact may cause dryness or mild mechanical irritation of skin.
- Spilled powder may create slippery surfaces.

Precautionary Measures

Avoid generating or breathing excessive dust.

Use appropriate ventilation and personal protective equipment during bulk handling.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Typical Content
Natural Graphite / Carbon	7782-42-5	85–90%
Naturally Occurring Mineral Matter / Ash	—	10–15%
Moisture	—	1–2%

Typical Carbon (LOI): 87.8%

Typical Ash Content: 12.2%

Natural mineral composition may vary slightly between production batches.



SECTION 4: FIRST-AID MEASURES

Inhalation

Move the affected person to fresh air. Keep at rest and seek medical attention if coughing, irritation or breathing discomfort persists.

Eye Contact

Rinse cautiously with clean water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

Skin Contact

Wash exposed skin thoroughly with soap and water. Remove contaminated clothing.

Ingestion

Rinse mouth with water. Do not induce vomiting unless instructed by medical personnel. Seek medical advice if discomfort develops.

Most Important Symptoms

Mechanical irritation of the eyes, nose or respiratory tract may occur following excessive dust exposure.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing media appropriate for the surrounding fire, including:

- Water spray
- Dry chemical
- Foam
- Carbon dioxide (CO₂)

Specific Hazards

Fine combustible dust dispersed in air may present a dust combustion hazard under certain conditions.

Avoid unnecessary accumulation and dispersion of fine dust.



Protective Equipment for Firefighters

Use appropriate protective equipment and self-contained breathing apparatus when required by surrounding fire conditions.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions

- Avoid breathing dust.
- Avoid unnecessary dust generation.
- Wear appropriate PPE.
- Provide adequate ventilation.

Cleanup Methods

Carefully sweep, shovel or vacuum spilled material using suitable industrial equipment.

Avoid dry-cleaning methods that generate excessive airborne dust.

Collect material into appropriate containers for reuse or disposal.

Environmental Precautions

Prevent unnecessary release of large quantities into drains, surface water or the environment.

SECTION 7: HANDLING AND STORAGE

Handling

- Avoid excessive dust generation.
- Avoid breathing airborne dust.
- Use adequate ventilation.
- Keep work areas clean.
- Avoid contact with ignition sources where significant airborne dust may be generated.
- Wash hands after handling.

Storage

Store in:

- A cool and dry area
- Well-ventilated conditions



- Original closed packaging
- An area protected from moisture and contamination

Keep packaging securely closed when not in use.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Provide adequate general or local exhaust ventilation where airborne dust may be generated.

Respiratory Protection

Use suitable particulate respiratory protection when ventilation is insufficient or significant dust exposure may occur.

Eye Protection

Wear safety glasses or protective goggles where dust exposure is possible.

Hand Protection

Protective work gloves are recommended for prolonged or bulk handling.

Skin Protection

Normal industrial work clothing is recommended.

Hygiene Measures

Wash hands thoroughly after handling and before eating, drinking or smoking.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Typical Information
Physical State	Solid
Appearance	Black Powder



Odor	Odorless / Characteristic Mineral Odor
Carbon (LOI)	85–90%
Typical Carbon	87.8%
Ash Content	10–15%
Typical Ash	12.2%
Moisture	1–2%
Specific Gravity	Approx. 2.1–2.3
Water Solubility	Insoluble
Available Grades	Fine / Medium-1
Flammability	Bulk material not readily flammable under normal handling conditions

Particle Size Distribution

Particle Size	Fine	Medium-1
300 Micron	0.00 %	0.94%
250 Micron	0.15 %	3.43%
150 Micron	1.35 %	8.12%
75 Micron	8.95 %	17.04%

SECTION 10: STABILITY AND REACTIVITY

Reactivity

Stable under normal recommended handling and storage conditions.

Chemical Stability



The product is chemically stable under normal conditions.

Possibility of Hazardous Reactions

No hazardous reactions are expected under normal conditions of use.

Conditions to Avoid

- Excessive airborne dust accumulation
- Strong ignition sources in dusty environments
- Unnecessary exposure to incompatible materials

Incompatible Materials

Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products

Under fire conditions, carbon oxides may be generated.

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity

No significant acute toxicity is expected under normal industrial handling conditions based on the nature of the material.

Inhalation

Excessive inhalation of airborne dust may cause mechanical irritation of the respiratory tract.

Eye Contact

Dust may cause mechanical irritation.

Skin Contact

Prolonged contact may cause mild irritation or dryness.

Ingestion

Not intended for ingestion. Accidental ingestion of small quantities is not expected to present



significant acute toxicity, but medical advice should be obtained if symptoms occur.

Chronic Exposure

Repeated or prolonged exposure to high concentrations of mineral dust should be avoided.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product is not expected to present significant acute environmental toxicity based on its mineral nature and low water solubility.

Persistence and Degradability

Graphite is an inorganic form of carbon and is not readily biodegradable.

Bioaccumulative Potential

No significant bioaccumulation is expected.

Mobility in Soil

Low mobility is expected because of the product's insolubility in water.

Environmental Precautions

Avoid uncontrolled release of large quantities into the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of product residues and contaminated packaging in accordance with applicable local, national and international regulations.

Where uncontaminated and technically suitable, recovered material may be reused or recycled.

Do not discharge large quantities into drains or waterways.

SECTION 14: TRANSPORT INFORMATION



Under normal transport conditions, Natural Graphite is generally transported as an industrial mineral product.

Transport Information	Status
UN Number	Not Assigned / Not Regulated*
UN Proper Shipping Name	Not Regulated*
Transport Hazard Class	Not Regulated*
Packing Group	Not Applicable*
Marine Pollutant	Not Expected

Transport Modes: Road / Sea / Multimodal

*Final transport classification should be verified against the exact product composition, packaging, destination and applicable ADR/IMDG/IATA requirements before shipment.

SECTION 15: REGULATORY INFORMATION

The user and importer are responsible for ensuring compliance with applicable chemical, occupational health, environmental and product regulations in the destination country.

Regulatory requirements may vary according to jurisdiction and intended use.

This SDS does not replace any country-specific registration or regulatory assessment that may be required.

SECTION 16: OTHER INFORMATION

Product Identification

Product: Graphite Drilling Grade
Chemical Family: Natural Graphite / Carbon
CAS No.: 7782-42-5
Recommended Use: Drilling Fluid Additive
Available Grades: Fine / Medium-1