

# Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



## 47700 Graphite Powder Silver

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Revised edition: 11.11.2019

Version: 2

Printed: 08.09.2021

### 1. Identification of the Substance/Mixture and of the Company/Undertaking

#### 1.1. Product Identifier

*Product Name:* Graphite Powder Silver

*Article No.:* 47700

*UFI:* --

#### 1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

*Identified uses:*

Lubricant  
Filler  
Material  
Pencil lead

*Uses advised against:*

#### 1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

*Company:* Kremer Pigmente GmbH & Co. KG

*Address:* Hauptstr. 41-47, 88317 Aichstetten, Germany

*Tel./Fax.:* Tel +49 7565 914480, Fax +49 7565 1606

*Internet:* www.kremer-pigmente.com

*E-Mail:* info@kremer-pigmente.com

*Importer:* --

#### 1.4. Emergency No.

*Emergency No.:* +49 7565 914480 (Mon-Fri 8:00 - 17:00)

#### 1.4.2 Poison Center:

### 2. Hazards Identification

#### 2.1. Classification of the Substance or Mixture

*Classification according to Regulation  
(EC) No. 1272/2008 (CLP/GHS)*

*This product does not require classification and labelling as hazardous according to CLP/GHS.*

*Possible Environmental Effects:*

#### 2.2. Label Elements

*Classification according to Regulation  
(EC) No. 1272/2008 (CLP/GHS)*

*No classification required according to the CLP/GHS guidelines.*

*Hazard designation:*

*Not applicable.*

*Signal word:*

*Hazard designation:*

*Safety designation:*

*Hazardous components for labelling:*

**Other Hazards**

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2.3. *Dust can form ignitable mixtures with air - Risk of dust explosion. Slightly irritating to skin and mucous, predominantly caused by mechanical effect.*

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### 3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

*Chemical Characterization:* Natural graphite, CAS No. 999999-99-4 (natural occurring substance); EINECS 310-127-6

*Information on Components / Hazardous Ingredients:*

*Additional information:* Exempted from the mandatory REACH Registration (Annex V No. 7)

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### 4. First Aid Measures

4.1. Description of the First Aid Measures

*General information:*

*Remove contaminated clothes.  
Place and transport in stable side position.  
If complaints or symptoms occur seek medical treatment.*

*After inhalation:*

*Supply fresh air. Consult physician if symptoms persist.*

*After skin contact:*

*Wash with soap and rinse with plenty of water.*

*After eye contact:*

*Protect unharmed eye.  
Remove contact lens.  
Rinse open eye for several minutes under running water. Should irritation continue, seek medical advice.*

*After ingestion:*

*Drink plenty of water. Get medical help in case of discomfort.*

4.2. Most important Symptoms and Effects, both Acute and Delayed

*Symptoms:*

*No further information available.*

*Effects:*

4.3. Indication of any Immediate Medical Attention and special Treatment needed

*Treatment:*

*Mineral dust.  
Treat symptomatically.*

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### 5. Fire-Fighting Measures

5.1. Extinguishing Media

*Suitable extinguishing media:*

*Foam, carbon dioxide (CO<sub>2</sub>), water, dry sand.*

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*Use extinguishing media for surrounding fire.*

*Unsuitable extinguishing media:*

*Water with full jet.*

### 5.2. Special Hazards arising from the Substance or Mixture

*Special hazards:*

*In case of fire: formation of carbon monoxide and dioxide.*

### 5.3. Advice for Firefighters

*Protective equipment:*

*Wear self-contained respiratory protective device.*

*Further information:*

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## 6. Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

*Personal precautions:*

*Wear protective clothing.*

*Floor may be slippery; use care to avoid falling.*

### 6.2. Environmental Precautions

*Environmental precautions:*

*Prevent contamination of soils, drains and surface water.*

### 6.3. Methods and Material for Containment and Cleaning Up

*Methods and material:*

*Clean up mechanically. Avoid dust formation.*

### 6.4. Reference to other Sections

*For information for safe handling see Section 7.*

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## 7. Handling and Storage

### 7.1. Precautions for Safe Handling

*Instructions on safe handling:*

*Avoid formation of dust. Do not inhale dust.*

*Avoid formation and deposition of dust. Provide adequate ventilation.*

*Avoid contact with eyes, skin and clothing.*

*Provide adequate ventilation.*

*Carry out filling operations only at sites with extractors available.*

*Hygienic measures:*

*Do not inhale dust. Wash hands before breaks and at the end of work.*

### 7.2. Conditions for Safe Storage, including any Incompatibilities

*Storage conditions:*

*Store in tightly sealed containers in a dry and cool room.*

*Requirements for storage areas and containers:*

*It is not permitted to store the product in passages, passageways, halls, on roofs, in attics and working rooms.*

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*Do not use food containers. Danger of confusion!*

*The containers should be durably labelled.*

*Preferably store in the original container*

*Information on fire and explosion protection:*

*Combustible material.*

*Dust may form an explosive mixture with air.*

*Take measures to prevent electrostatic discharge.*

*Vacuum dust on site.*

*Keep away from dust and heat sources.*

*Do not store together with flammable products.*

*Do not store together with: oxidants.*

*Do not store together with: foodstuffs, medicinal products and animal feed.*

*Do not store together with: infectious, radioactive and explosive substances.*

*Storage class:*

*11; Combustible solids (TRGS 510)*

*Further Information:*

*Only substances with the same storage group should be stored together.*

### 7.3. Specific End Use(s)

*Further information:*

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## 8. Exposure Controls/Personal Protection

### 8.1. Parameters to be Controlled

*Parameters to be controlled (DE):*

*Long-term value: 0.65 mg/m<sup>3</sup> (airborne fraction); 4 mg/m<sup>3</sup> (inhalable fraction)*

*Parameters to be controlled:*

*Derived No-Effect Level (DNEL):*

*813 mg/kg bw/d (consumer, swallowing, long-term exposition - systemic effects)*

*0.3 mg/m<sup>3</sup> (consumer, inhalation, long-term exposition - local effects)*

*1.2 mg/m<sup>3</sup> (worker, inhalation, long-term exposition - local effects)*

*Predicted No-Effect Concentration (PNEC):*

*Additional Information:*

### 8.2. Exposure Controls

*Technical protective measures:*

*Preferably handle in a closed system.*

*Care for very good ventilation of the working room.*

*Vacuum dust on site.*

*Personal Protection*

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### *General protective measures:*

*Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work. Wash contaminated clothes before reuse.*

### *Respiratory protection:*

*Dust mask recommended when very dusty (with particle filter P1).*

### *Hand protection:*

*Not required*

### *Protective glove material:*

### *Eye protection:*

*Recommended in case of extreme dust formation (EN 166).*

### *Body protection:*

*Protective clothing.*

### *Environmental precautions:*

*No special measures required.*

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## 9. Physical and Chemical Properties

### 9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>solid</i>
<i>Color:</i>	<i>gray, black</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>not determined</i>
<i>pH-Value:</i>	<i>neutral - weakly acid</i>
<i>Melting temperature:</i>	<i>3550°C</i>
<i>Boiling temperature:</i>	<i>3750°C (sublimation)</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>not applicable</i>
<i>Flammability (solid, gas):</i>	<i>not applicable</i>
<i>Upper explosion limit:</i>	<i>not determined</i>
<i>Lower explosion limit:</i>	<i>not determined</i>
<i>Vapor pressure:</i>	<i>not applicable</i>
<i>Vapor density:</i>	<i>No information available.</i>

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*Density:* 2.26 g/cm<sup>3</sup> (20°C)

*Solubility in water:* < 0.001 g/l (20°C)

*Coefficient of variation (n-Octanol/Water):*  
not determined

*Auto-ignition temperature:*  
not determined

*Decomposition temperature:*  
not determined

*Viscosity, dynamic:*  
not applicable

*Explosive properties:*  
*Basically, fine graphite dust can detonate under certain conditions. The data on the dust explosions of natural graphite depend on the purity and particle size distribution. Risk of dust explosion (Category ST1).*

*Oxidizing properties:*  
no information available

*Bulk density:*

### 9.2. Further Information

*Solubility in solvents:*

*Viscosity, kinematic:*

*Burning class:*

*Solvent content:*

*Solid content:*

*Particle size:*

*Other information:*

*Ignition temperature: > 500°C*

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## 10. Stability and Reactivity

### 10.1. Reactivity

*Stable if used according to specifications.*

### 10.2. Chemical Stability

*Stable if used according to specifications.*

### 10.3. Possibility of Hazardous Reactions

*Ignition hazard and formation of inflammable gases or vapors with: fluorine and chlorine trifluoride.*

### 10.4. Conditions to Avoid

*Conditions to avoid:*

*Protect from heat.  
Avoid humidity.*

*Thermal decomposition:*

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### 10.5. Incompatible Materials

*Strong oxidizing agents.*

### 10.6. Hazardous Decomposition Products

*In the event of fire: see part 5.*

### 10.7. Further Information

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## 11. Toxicological Information

### 11.1. Information on Toxicological Effects

*No toxicity expected.*

#### *Acute Toxicity*

##### *LD50, oral:*

*> 2000 mg/kg (rat; OECD 401)*

*NOAEL: 813 mg/kg bw/day (rat; OECD 422)*

##### *LD50, dermal:*

*No information available.*

##### *LC50, inhalation:*

*> 2000 mg/m<sup>3</sup> (4h, rat; OECD 403)*

*NOAEC: 12 mg/m<sup>3</sup> (rat; OECD 412)*

#### *Primary effects*

##### *Irritant effect on skin:*

*No irritant effect known.*

##### *Irritant effect on eyes:*

*No irritant effect known.*

##### *Inhalation:*

*No irritant effect known.*

##### *Ingestion:*

*No irritant effect known.*

##### *Sensitization:*

*No sensitizing effects known.*

##### *Mutagenicity:*

*In vitro genetic-toxicity: Chromosomal Aberration Test (OECD 473): negative*

*In vitro genetic-toxicity: Ames-Test negative (OECD 471)*

##### *Reproductive toxicity:*

*No teratogenic effect (rat; OECD 422)*

##### *Carcinogenicity:*

*Classification of the U.S. National Institute of Health in the National Toxicology Program (NTP): Natural graphite containing crystalline silica (quartz) is classified by NTP as probably carcinogenic to humans.*

##### *Teratogenicity:*

*No information available.*

##### *Specific target organ toxicity (STOT):*

*Single exposure: insufficient information for a classification.*

*Repeated exposure: insufficient information for a classification.*

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### *Additional toxicological information:*

#### *Aspiration hazard:*

*Prolonged exposure to excessive dust of natural graphite can cause breathing difficulties.*

*Long-term chronic exposure to natural graphite can facilitate the development of silicosis (pneumoconiosis)*

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## 12. Ecological Information

### 12.1. Aquatic Toxicity

*Crystalline natural graphite is a chemically inert product, with no impact on the environment.*

#### *Fish toxicity:*

*LC50: > 100 mg/l (96h, Pimephales promelas; OECD 203)*

#### *Daphnia toxicity:*

*EC50: > 100 mg/l (Daphnia magna; OECD 202)*

#### *Bacteria toxicity:*

*No data available.*

#### *Algae toxicity:*

*IC50: > 100 mg/l (72h, Pseudokirchneriella subcapitata; OECD 201)*

### 12.2. Persistency and Degradability

*No information available.*

### 12.3. Bioaccumulation

*The product is not hazardous to the aquatic system.*

### 12.4. Mobility

*Product is not water soluble.*

### 12.5. Results of PBT- und vPvP Assessment

*This product is neither a PBT or vPvB substance nor does it contain a PBT or vPvB substance.*

### 12.6. Other Adverse Effects

#### *Water hazard class:*

*Not hazardous.*

#### *Behaviour in sewage systems:*

#### *Further ecological effects:*

#### *AOX Value:*

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## 13. Disposal Considerations

### 13.1. Waste Treatment Methods

#### *Product:*

*Residues should be used wherever possible; contaminated waste should be used for energy (incineration).*

#### *European Waste Code (EWC):*

*010499 - Waste not otherwise specified*

#### *Uncleaned packaging:*

*Dispose of according to official local regulations.*

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Waste Code No.:

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### 14. Transport Information

#### 14.1. UN Number

ADR, IMDG, IATA

#### 14.2. UN Proper Shipping Name

ADR/RID:

*No hazardous goods according to ADR / DOT (US) (land transportation).*

IMDG/IATA:

*Not hazardous goods*

#### 14.3. Transport Hazard Classes

ADR Class:

*not applicable*

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

*not applicable*

Hazard no.:

EmS No.:

IATA Class:

*not applicable*

Hazard no.:

#### 14.4. Packaging Group

ADR/RID:

*not applicable*

IMDG:

IATA:

#### 14.5. Environmental Hazards

*None*

#### 14.6. Special Precautions for User

*Not classified as a dangerous good under transport regulations.*

#### 14.7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

#### 14.8. Further Information

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### 15. Regulatory Information

#### 15.1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

*0, not hazardous (German Regulation)*

Local regulations on chemical accidents:

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*Seveso III Directive: not applicable under Directive 2012/18/EC.*

*Employment restrictions:*

*Restriction and prohibition of application:*

*Technical instructions on air quality:*

*Total dust, including fine dust:*

*The emissions of the exhaust fumes must not exceed the following values: Mass flow: 0.20 kg/h; mass concentration: 20 mg/m<sup>3</sup>.*

### 15.2. Chemical Safety Assessment

*A Chemical Safety Assessment has not been carried out for this product.*

### 15.3. Further Information

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### 16. Other Information

*This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.*