



Safety Data Sheet according to Directive 91/155/EC

Revision Date: January 2018

1) Identification of the substance/preparation and the company

Trade Name: Brodie&Middleton Graphite

Application: Artists' and Theatrical Material

Manufacturer/Supplier:

Brodie&Middleton Ltd

30-31 Store Street

London WC1E 7QE

Telephone: 020-7836 3289

Fax: 020-7636 8733

2) Hazards Identification

Classification according to Regulation (EC) No 1272/2008

Classification

Not a hazardous substance or mixture.

Label Elements

Not a hazardous substance or mixture.

Other Hazards

Not applicable.

3) Composition/Information on ingredients

Graphite >96%

CAS No: 7782-42-5

EU No 231-955-3

4) First Aid Measures

General Information:	Ensure that medical personnel are aware of the material involved and take precautions to protect themselves. No hazards which require special first aid measures.
If inhaled:	Symptoms: breathing difficulties may be encountered if the patient has been exposed to a large volume of airborne dust. First Aid Treatment: patient should retreat or be removed to an area where dust is below the exposure limit. If breathing difficulties continue, medical assistance should be sought.
In case of skin contact:	Symptoms: none First Aid Treatment: none required, other than for reasons of personal hygiene.
In case of eye contact:	Symptoms: dusty or gritty sensation in the eye causing impaired vision and/or watering of the eyes. Eyes should be washed thoroughly using an approved Saline eye wash. If irritation continues, seek medical assistance. First Aid Treatment: patient should retreat or be removed to an area where re-contamination will not occur.
After Ingestion:	Symptoms: dusty or gritty sensation in the mouth and throat. First Aid Treatment: patient should retreat or be removed to an area where re-contamination will not occur. If ingestion is of a small quantity then the mouth may be rinsed or washed out with water or mouth wash. Seek medical attention if quantity ingested is large.
Additional Medical Information:	None
Most important symptoms and effects, both acute and delayed:	None known.
Indication of any immediate medical attention and special treatment needed:	Treat symptomatically.

5) Fire Fighting Measures

Class of Inflammability

Graphite is not readily combustible, nor is it readily explosive. It slowly decomposes in the presence of oxygen at >800° Centigrade

Extinguishing media

Suitable extinguishing media: Water, CO2 or sand

Special hazards arising from the substance or mixture

As an electrical conductor, graphite may pose a potential threat of short circuit to electrical equipment.

Decomposition: CO and CO2

Advice for fire fighters

None

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions: Not necessary other than dust masks or respirator to combat airborne dust and protective clothing to prevent physical contamination.

Environmental precautions

Environmental precautions: Efforts should be made to prevent the product becoming airborne.

Methods and Materials for Containment and Cleaning Up

Methods and materials: At all times the spillage should be removed by vacuum cleaner where possible so as to reduce the creation of dust. Should this not be possible then the product may be carefully swept avoiding unnecessary creation of airborne dust. Material should be transferred to a covered salvage container for appropriate disposal.

Additional Information: Personal Protection Equipment (PPE) - Refer to Section 8. Disposal - Refer to Section 13.

7) Handling and Storage

Precautions for Safe Handling

Advice on safe handling: No special requirements but care should be taken to ensure the minimum release of airborne dust to prevent inhalation and contact with electrical equipment.

Advice on protection against fire and explosion: N/A.

Hygiene measures: General industrial hygiene practice.

Safe Storage

Storage conditions: For the purposes of safety there are no special measures that should be adopted. Naturally, spillage should be avoided, and to this end packaging should be protected from water damage, condensation or excess humidity and ultra-violet light. Exposure over a long period to any or all of the above may result in the failure of the packaging. Graphite is an inert mineral and will not decompose with age.

8) Exposure/Personal Protection

Exposure Controls

Appropriate engineering controls: Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits indicated in this section. The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment.

Control Parameters: Nuisance particles/Nuisance dust

Exposure Limit Values: TLV (Threshold Limit value) = 10mg/m³
PEL (Personal Exposure Limit) = 15mg/m³
Respirable Dust = 5mg/m³
Total inhalable dust 10 mg/m³

Operational Exposure Controls: Handling systems and plant should be enclosed or suitably served by ventilation or dust extraction equipment to minimize release to atmosphere.

Personal protective equipment

Eye Protection: Safety glasses or goggles.

Skin Protection: Dust proof overalls with elasticated wrists/ankles.

Hand Protection: Suitable gloves and/or barrier cream.

Respiratory Protection: As with any airborne dust, inhalation should be avoided and in consequence dust masks or respirators should be worn in situations where there is any dust emission.

Hygiene: Do not breathe dust. Avoid contact with eyes. Good housekeeping/hygiene practices should be employed

Environmental Protection: Avoid contamination of the environment.

9) Physical and chemical Properties

Appearance: silvery or grey/black powders or granules
Physical State: Powder
Odour: Odourless
Odour Threshold: Not applicable
pH: N/A
Melting Point / Range: >2800°C
Boiling Point: Not applicable
Freeze Point: Not applicable
Flash Point: Not applicable

Evaporation Rate:	Not applicable
Flammability (solid, gas):	Not applicable
Vapour Pressure:	Negligible at 20°C
Vapour Density:	Not applicable
Explosive Properties:	Dust explosion class St1 (Kst >0-200 bar.m/s)
Relative Density:	1.9 - 2.3 g/cm ³
Water Solubility:	Insoluble
Viscosity:	Not applicable

10) Stability and Reactivity

Reactivity:	Stable under normal conditions.
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	None known.
Conditions to avoid:	Contact with oxidising agents.
Incompatible materials:	Oxidizing agents.
Hazardous decomposition products:	CO and CO ₂

11) Toxicological Information

Acute Animal Toxicity Data:

Oral toxicity: LD50 > 2,000mg/kg body weight (rat)
Inhalation Toxicity: LC50 > 2,000mg/m³ air (rat)

Human Toxicity Data:

Oral toxicity – no available data
Inhalation toxicity – no available data
Skin contact – no available data
Eye contact – no available data

Contact with skin and eyes may possibly cause irritation. Inhalation of high concentrations of graphite dust over prolonged periods of time may, in rare cases, cause graphite pneumoconiosis. Symptoms of exposure can include coughing, shortness of breath, and decrease of pulmonary function. Pre-existing pulmonary disorders such as emphysema may possibly be aggravated by prolonged exposure to high concentrations of graphite dust.

12) Ecological Information

Natural Graphite is inert and insoluble and should therefore not pose any environmental hazards but care should be taken to avoid any unnecessary discharge into the environment.

Not biodegradable.

13) Disposal Information

Waste Treatment Methods

In authorised dumps, in accordance with Local Authority requirements.

Treat contaminated containers in the same way as product.

14) Transport Information

Not regulated as a dangerous good.

Not classified as dangerous in the meaning of transport regulations.

15) Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture.

No compulsory identification under EC directives and national regulations.

16) Other information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations.

To best of our knowledge the information contain herein is accurate. However, neither the above supplier assumes any liability whatsoever for the accuracy or completeness of the information herein

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist