

SAFETY DATA SHEET

Page 1 of 7

Klinger Graphite Laminate

H,HL,SLS,PSM,PDM

1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name Klinger Graphite Laminate

Other Names Graphite Sheeting/Gaskets , Foil Type H, Graphite Laminates & Graphite Metal Inserts(SLS,PSM,PDM)

Recommended Use High temperature gasket material

Supplier KLINGER Limited (ABN 95 008 679 838)
38 McDowell St
Welshpool
WA 6106
AUSTRALIA
Tel +61 (0)8 9251 1600 or 1300 798 279
(0800 – 1700 Australian Western Standard Time – GMT +8 hrs)
Fax +61 (0)8 9350 9286

**Emergency
Telephone Number :** +61 412626010

2 - HAZARDS IDENTIFICATION

Not classified as hazardous according to the criteria of **Safe Work Australia** and **GHS (Globally Harmonized System of Classification and Labelling of Chemicals)**.

Classification according to GHS: Not Classified

GHS Label Elements: Not Applicable for these products.

Other Hazard Information : The product is considered harmless to health and the environment in the form supplied and if stored and handled in the correct manner – see Section 7. No hazards are known based on present information.

SAFETY DATA SHEET

Page 2 of 7

Klinger Graphite Laminate

H,HL,SLS,PSM,PDM

3 - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS	Proportion
Graphite (Carbon 95-99%)	7782-42-5	> 60%
Graphite Laminates contains stainless steel insert		<10%

4 - FIRST AID MEASURES

Inhalation	Dust arising from working the product should be treated as nuisance particulate material. Inhalation of dust may cause irritation to the mucous membranes and upper respiratory tract. Movement of exposed individual to fresh air is recommended.
Skin	May cause irritation to individuals with sensitive skin. Wash skin with soap and water. Launder heavily contaminated clothing before reuse. If prolonged irritation occurs, seek medical advice.
Eye	May cause mechanical irritation in contact with eyes. Remove small solid particles and rinse with water for a minimum of 15 minutes. In all cases of eye contamination it is a sensible precaution to seek medical advice.
Ingestion	Not hazardous. Not a likely source of exposure. If ingested, give plenty of fluid to assist passage through system. Seek medical attention if irritation occurs.

5 - FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Water, carbon dioxide, powder extinguishers, foam extinguishers
Hazards from Combustion Products	Graphite does not burn or support combustion. When heated to decomposition

SAFETY DATA SHEET

Page 3 of 7

Klinger Graphite Laminate

H,HL,SLS,PSM,PDM

temperature, the following may be produced: carbon monoxide; carbon dioxide; low molecular weight organic compounds.

Precautions for Firefighters and Special Protective Equipment

Breathing apparatus and eye protection must be worn to protect from dust and decomposition products.

6 - ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Fire: See Section 5

Personal: See Section 4

Environmental: No known environmental hazards exist.

Methods and Materials for Containment and Cleanup

Approved vacuum cleaners with high efficiency filters (HEPA) conforming to AS3544 or equivalent must be used to clean areas.

Additional

In the case of improper use (see Section 8) fine dust may result. Adequate suction and filtering of the exhaust air should be ensured.

7 - HANDLING AND STORAGE

Handling

No special precautions necessary when handling the material in its finished form. However, whenever further processing of graphite is undertaken, the potential for the release of particles and fibres exists. See Section 8. Protective gloves are recommended for handling metal inserted laminates to prevent laceration.

Storage

Store in a cool, dry, well ventilated area removed from foodstuffs. Material should not be stored in the vicinity of heat sources. Excessive heat or humidity in the storage area may diminish the product's performance in its intended application.

SAFETY DATA SHEET

Page 4 of 7

Klinger Graphite Laminate

H,HL,SLS,PSM,PDM

8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standards (Time-Weighted Averages)

Graphite: 3mg/m³ ES-TWA
Carbon Fibre: 0.5fibre/mL ES-TWA
(Recommended - Note that Carbon fibre has no current assigned exposure standard, however as a general safety precaution the above guideline may be used.)

Biological Limit Value

No Biological Limit Value allocated.

Engineering Controls

Ensure adequate ventilation exists to maintain air concentrations below exposure standards. Do not inhale dust/fibres. Use localised extraction or wet methods of work to control dust levels.

Personal Protective Equipment

No special precautions necessary when handling the material in its finished form. However, whenever further processing of sheets/gaskets is undertaken, the potential for the release of particulates exists. In the case of particle generation exceeding the above-noted National Exposure Standards, recommended PPE are rubber/PVC gloves, coveralls, safety glasses and a P2 particulate (AS1716 or equivalent) respirator. When removing spent material or when high levels of dust exist a full-face class H particulate cartridge respirator or full-face positive pressure demand airline respirator (AS1716 or equivalent) is recommended. Good hygiene practices must always be maintained.

9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form: Solid Sheet
Colour: Grey/Black

Odour

A faint solvent odour may be detectable with the laminates

SAFETY DATA SHEET

Page 5 of 7

Klinger Graphite Laminate

H,HL,SLS,PSM,PDM

pH	4.5-7
Vapour Pressure	Not applicable
Vapour Density	Not applicable
Boiling Point/Range	Not applicable
Freezing/Melting Point	Not applicable
Flashpoint	Does not flash; self-extinguishing
Solubility (water)	Insoluble
Specific Gravity/Density	at 20 ° C : 0.7-1.5
Additional	None.

10 - STABILITY AND REACTIVITY

Chemical stability	Stable under intended operating conditions.
Conditions to Avoid	Not known
Incompatible Materials	Contact with very strong oxidizers such as peroxides, chlorine, trifluoride and fluorine may cause fires and explosions.
Hazardous Decomposition Products	None with proper use. Oxides of carbon at very high temperatures.(carbon monoxide and carbon dioxide)

11 - TOXICOLOGICAL INFORMATION

The material in its finished form presents no known health hazard. Inhalation of natural graphite dust may lead to pneumoconiosis and pulmonary fibrosis with such symptoms as

SAFETY DATA SHEET

Page 6 of 7

Klinger Graphite Laminate

H,HL,SLS,PSM,PDM

chest tightness, shortness of breath, coughing, black sputum and difficulty breathing. When this product is used as intended, negligible levels of graphite are emitted.

12 - ECOLOGICAL INFORMATION

Ecotoxicity	Not known. Insoluble in water, precipitates.
Persistence and Degradability	Not known. Not biologically degradable (self-classification).
Mobility	Not known

13 - DISPOSAL CONSIDERATIONS

Disposal Methods	No special requirements exist. Dump on industrial depositories. Seal waste dust in heavy duty plastic bags (200 microns minimum). Do not dispose of in an incineration system under any circumstance. Local, state and federal statutory regulations must be observed.
Special Precautions	Not applicable

14 - TRANSPORT INFORMATION

UN Number	None allocated
UN Proper Shipping Name	None allocated
Class and Subsidiary Risks	Not relevant
Packing Group	Not relevant
Special Precautions for User	Do not transport with Explosives, Oxidising agents, Organic peroxides and foodstuffs. In roll and cut packing form there is no risk associated with the product under normal transport conditions. Not defined

SAFETY DATA SHEET

Page 7 of 7

Klinger Graphite Laminate

H,HL,SLS,PSM,PDM

as a Dangerous Good by the Australian Code for the
Transport of Dangerous Goods by Road and Rail.

Hazchem Code

None allocated

15 - REGULATORY INFORMATION

Regulations for dangerous materials not applicable.

16 - OTHER INFORMATION

Date of issue/revision: 04.03.21

All information and recommendations contained in this publication are based on the present level of knowledge and experience. Since the conditions of use are beyond our control, users must satisfy themselves that products are suitable for the intended processes and applications. No warranty is given or implied in respect of information and recommendations or that any use of the products will not infringe rights belonging to other parties. Our most current General Sales Conditions shall apply.

END OF MSDS