

D2013 Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION OF THE COMPANY

PRODUCT: D2013 Friction Material
COMMON USES: Brakes/Clutch Lining
SUPPLIER: Ferotec Friction Ltd
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2. COMPOSITION/INFORMATION ON INGREDIENTS

This product contains a number of ingredients, all of which have become sealed in a synthetic rubber/resin binder resulting in a low probability of dust/fibre release.

Chemical Name	CAS No	Concentration (%)	OEL (mg/m ³)	Exposure limit
Barium Sulphate	7727-43-7	5-7	Total Inhalable 10 mg/m ³ Respirable 4 mg/m ³	8 hour TWA
Calcium Carbonate	1317-65-3	< 1	Total Inhalable 10 mg/m ³ Respirable 4 mg/m ³	8 hour TWA
Graphite	7782-42-5	12-14	Total Inhalable 10 mg/m ³ Respirable 4 mg/m ³	8 hour TWA

3. HAZARD IDENTIFICATION

Exposure to dust created by handling this product should be kept a low as reasonably practicable and limits as above are observed. Handling of this product may cause skin irritation.

4. FIRST AID MEASURES

Inhalation Avoid breathing dust. In the event of excessive inhalation of dust, remove the individual to fresh air. Obtain medical advice.
Skin Contact Clean skin with soap and water. Obtain medical advice if irritation persists.
Eye Contact Irrigate with clean water for at least 15 minutes. Obtain medical advice if irritation persists.
Ingestion It is not normally considered that the product will be ingested, but if small quantities are ingested, seek medical advice.

5. FIRE-FIGHTING MEASURES

Extinguishing Media Any standard extinguishing media may be used.
Protective Equipment Fire fighters, and others exposed, wear self-contained breathing apparatus.
Exposure Hazards When heated to very high temperatures, may give off smoke and decomposition products which may contain toxic compounds.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment as recommended in section 8. Avoid breathing dust.
Environmental Precautions No special precaution required
Methods for Cleaning up Remove any dust generated by vacuum or wet cloth.

7. HANDLING AND STORAGE

Handling Excessive handling may generate dust. Use adequate ventilation to keep dust concentration below stipulated standard.
Storage Conditions Liable to corrode, store in a dry place.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures	Use local exhaust ventilation to maintain airborne dust levels to below established exposure standard.
Personal Protection	
Respiratory Protection	Wear suitable protection if exposure limits are exceeded.
Hand Protection	Wear impervious gloves.; use suitable barrier creams and maintain good hygiene standards.
Eye Protection	Wear safety glasses when machining or abrading the product.
Skin Protection	Wear overalls of close weave material

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dense solid	Colour	Black
pH-value	Not applicable	Melting point/range	Not applicable
Explosive properties	As supplied, does not present an explosion hazard. however, dust produced from grinding operations presents an explosion hazard.		
Density	3.30 to 3.50 g/cm ³	Autoflammability	> 350°C
Flammability	Does not support combustion but will burn at elevated temperatures. Will burn when finely divided.		
Odour	Characteristic friction material odour	Boiling point/range	Not applicable
Flash point	Not applicable	Vapour pressure	Not applicable
Solubility in water	Not applicable	Viscosity	Not applicable

10. STABILITY AND REACTIVITY

Stability	Stable
Conditions to avoid	Prolonged exposure to elevated temperatures >300°C
Materials to avoid	Not applicable
Hazardous decomposition products	CO, CO ₂ , phenols, formaldehyde
Hazardous Reactions	Reacts with acids and H ₂ gas.

11. TOXICOLOGICAL INFORMATION

Short Term Effects	
Inhalation	May cause irritation to upper respiratory tract
Ingestion	Not established
Skin Contact	May cause temporary irritation
Eye Contact	May cause irritation
Chronic Effects	
Inhalation	Not established
Ingestion	Not established
Skin Contact	Not established
Eye Contact	Not established
Carcinogenicity	Not established

12. ECOLOGICAL INFORMATION

Bioaccumulation	Not established
Mobility	Not established
Ecotoxic effects	Not established
Biodegradation	Not inherently biodegradable

13. DISPOSAL CONSIDERATION

Product	Seal all dust created by abrading in impervious bags and dispose to a suitable licensed landfill site.
Contaminated Packaging	Remove all packaging for recovery or incinerate/landfill

14. TRANSPORT INFORMATION

Not classified as dangerous for conveyance. use any container of suitable size and length.

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15. REGULATORY INFORMATION

EEC Classification	Not classified
Refer to	Health & Safety at Work Act 1974 Control of Substances hazardous to Health (COSHH) Regulations 1994
Please note	This Safety Data Sheet does not constitute the user's own assessment of workplace risk as required by other health and safety legislation.

16. ADDITIONAL INFORMATION

Further Information	Health and Safety Executive Guidance Note <i>EH40/2000 Occupational Exposure Limits 2000</i> Health and Safety Executive Guidance Note <i>EH46- Man-Made Mineral Fibres</i> Health and Safety Executive Guidance Note <i>MDHS14 - General Methods for the Gravimetric Determination of Respirable and Total Inhalable Dust</i> Health and Safety Executive Guidance Note <i>MDHS59 - Man-Made Mineral Fibre</i>
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This information is based on our present knowledge and is accurate at the date of issue, to the best knowledge of Ferotec Friction Ltd. However, it shall not constitute a guarantee for any specific product featured and shall not establish a legally contractual relationship and condition or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage, use or disposal of the product.

For any additional information, contact Ferotec Friction Ltd.