



Product Safety Data Sheet

1. Identification of The Preparation and Company

Product Name	: Mastic Asphalt
All Grades	: Roofing, Flooring, Paving, Tanking and Filled Bitumen.
Product Uses	: Waterproofing and Paving of Buildings, Roads and Bridges.
Manufacturer/Supplier	: Pure Asphalt Company Limited Burnden Works, Burnden Road, Bolton, Lancashire, BL3 2RD
Telephone	: (01204) 523 244
Fax	: (01204) 395 394

2. Composition/Information on Ingredients

Preparation Description	: A blend of Suitable graded mineral aggregates mixed with asphaltic cement (bituminous binders) derived from crude petroleum oils and Trinidad Lake Asphalt.
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3. Hazard Identification

EC Classification :	Not classified as dangerous under EC criteria.
Health Hazards :	<p>At ambient temperature mastic asphalt presents no health hazard.</p> <p>The hazards presented by mastic asphalt will depend on the temperature of the mix, type of binder, situation and method of application employed.</p> <p>Burns during the remelt and application stages are the main hazard of bituminous materials.</p> <p>Fumes from bituminous materials are unlikely to be hazardous during application in well ventilated open aspects, however there could be a risk to health by inhalation of high vapour concentrations that may arise in confined or semi-confined areas.</p> <p>At normal operating temperatures, as detailed in the British Standards Institution's relevant code of practice, risk of fire is minimal, however extended overheating of minimal quantities in reheating equipment could result in spontaneous ignition.</p> <p>Mastic asphalt is not classified as dangerous to the environment.</p>



4. First Aid Measures

In all cases if symptoms are severe, persist or cause concern obtain immediate medical advice.

First aid procedures apply when the product is at elevated temperature.

Inhalation : If inhalation of mists, fumes or vapour causes irritation to the nose or throat, remove to fresh air. If rapid recovery does not occur, obtain medical attention.

Skin contact : If contact with hot product, cool the burn area by flushing with large amounts of water. Do not attempt to remove anything from the burn area or apply burn creams or ointments. Cover the burn area loosely with a sterile dressing, if available. Transport to the nearest medical facility for additional treatment. It should be noted this product contracts on cooling. Where a limb is encased, care should be taken to avoid the development of a tourniquet effect. In the event of this occurring the adhering product must be softened and/or split to prevent restriction of blood flow. All burns should receive medical attention.

Eye Contact : Hot product – If contact with hot product, cool the burn area by flushing with large amounts of water. Do not attempt to remove anything from the burn area or apply burn creams or ointments. Cover the burn area loosely with a sterile dressing, if available. Transport to the nearest medical facility for additional treatment. All burns should receive medical attention.

Ingestion : Under normal conditions of use, this is not expected to be a primary route to exposure. Do not induce vomiting. Obtain immediate medical advice.

5. Fire Fighting Measures

Clear fire area of all non-emergency personnel.

Extinguishing Media : Extinguish fire with foam, dry powder, sand or earth. Do not use water in a jet.

Protective Equipment : Proper protective equipment including breathing apparatus must be worn when approaching a fire in a confined space.

6. Accidental Release Measures

No problem at ambient temperature when product is solid.

Avoid contact with spilled or released material. For guidance on selection of personal protective equipment see Chapter 8 of this Product Safety Data Sheet.



- Protective Measures** : Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.
- Clean up Methods** : Small spillage:
 Allow product to cool and solidify. Shovel into a suitable clearly marked container for disposal or reclamation in accordance with local regulations.
 Large spillage:
 Prevent from spreading by making a barrier with sand, earth or other containment material. Treat residues as for small spillage.
- Additional Advice** : Local authorities should be advised if significant spillages cannot be contained.

7. Handling and Storage

- General Precautions** : Skin contact with hot mastic asphalt should be avoided.
- Handling** : For quality, health and safety reasons do not exceed the recommended storage and handling temperatures.
 Transportation of hot mastic asphalt materials can only be undertaken in suitably heated and mechanically agitated mixer equipment.
 Mastic asphalt in block form may be transported loose tipped in bulk carriers or palletised, banded or film wrapped.
- Storage** : Mastic asphalt in block form can be stored for unlimited periods, although it may distort in shape if subjected to warm ambient temperatures. Care should be taken when stacking palletised materials on uneven ground in warm conditions.
 Double stacking of pallets should be avoided.

Palletised mastic materials, unless specifically packed and indicated, are unsuitable for crane handling.

8. Exposure Controls/Personal Protection

SUBSTANCE	OCCUPATIONAL EXPOSURE STANDARD	
	Long-term exposure limit 8-hour TWA	Short-term Exposure Limit 15 min ref period
Limestone	10 mg/m ³ total inhalable dust 4 mg/m ³ respirable dust	
Asphalt, petroleum fumes	5 mg/m ³	10 mg/m ³
Hydrogen sulphide	14 mg/m ³	21 mg/m ³

Advise applicable when handling the product at elevated temperatures.



Exposure Controls	: The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include. Adequate ventilation to control airborne concentrations below the exposure guidelines/limits.
Personal Protective Equipment	: PPE should meet recommended national standards. Check PPE suppliers.
Personal Protection	: Goggles, approved gloves and suitable safety footwear should be worn during the preparation of block materials for charging into site remelting equipment.
Protective Clothing	: Long sleeved clothing, full length trousers and safety footwear should be worn at all times.
Respiratory Protection	: No respiratory protection is ordinarily required under normal conditions of use.
Environmental Exposure Controls	: Minimise release to the environment. An environmental assessment must be made to ensure compliance with local environmental legislation.

9. Physical and Chemical Properties

Appearance	: Black, solid at ambient temperature.
Odour	: Characteristic.
Softening Point	: 80°C – 120°C.
Flash Point	: Above 300°C.
Relative Density	: 2.4 (at 15°C).

10. Stability and Reactivity

Stability	: Stable under normal conditions of use.
Conditions to avoid	: Heating above maximum recommended storage and handling temperatures will cause binder degradation and evolution of vapours.

11. Toxicological Information

Acute Inhalation Toxicity	: Not considered to be an inhalation hazard under normal conditions of use. Avoid vapours from heated materials to prevent exposure to potentially toxic/irritating fumes.
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- Skin Irritation** : Expected to be slightly irritating. Contact with hot material can cause thermal burns which may result in permanent skin damage.
- Eye Irritation** : Expected to be slightly irritating. Hot product may cause severe eye burns and/or blindness.
- Respiratory Irritation** : Inhalation of vapours or mists may cause irritation to the respiratory system.
- Carcinogenicity** : Bitumens are not classified as dangerous under EC criteria. Bitumens contain low concentrations of Polycyclic Aromatic Compounds (PACs). In undiluted bitumens these PACs are not considered to be bio-available. Despite the known presence of PACs there is no evidence that exposure to undiluted bitumens or their fumes is harmful.

12. Ecological Information

Mastic asphalt should not be allowed to enter drains or watercourses. Products are non biodegradable and are expected to be practically non toxic to aquatic organisms.

13. Disposal Considerations

- Material Disposal** : Recover or recycle if possible. Unused mastic asphalt in cold state is inert and if not recycled should be disposed of in accordance with national and local waste laws and regulations.

14. Transport Information

Not classified as dangerous for transport.

15. Regulating Information

Not classified as dangerous under the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (chip 3).

16. Other Information

- Reference Sources** : REF 1 : HSE Guidance Notes EH40 – Occupational Exposure Limits.
- REF 2** : CONCAWE Product Dossier 92/104 – Bitumens and Bitumen Derivatives.