

**Mastic Asphalt (PASDS 01)**

 Product Ref: (DsC6-0209)  
 Issue No: 2

**COMPOSITION / INFORMATION ON INGREDIENTS**

This data sheet covers all grades of Mastic Asphalt - Roofing, and Paving - in the Langley Waterproofing Systems range. It includes grades supplied in solid block form (nominal 20 kg) and molten "hot charge" form.

The materials used in the manufacture of mastic asphalt include: asphaltic cement (which consists of bitumen, lake asphalt, asphaltite or blends of these with one another or with flux oil), fine and coarse aggregates. Certain grades of mastic asphalt are polymer-modified and some may include colouring pigments.

As supplied in block form, the products do not represent any significant risk to health. There are no components at sufficient concentration to require a hazard classification for health in accordance with The Chemicals (Hazard Information and Packaging for supply) Regulations 1994, (CHIP 2) as amended.

The products may be coated with a dusting of fine crushed limestone or china clay, substances for which there are Occupational Exposure Standards (OES). OESs also exist for asphalt, petroleum fumes (bitumen) and for hydrogen sulphide, which may be emitted when the product is heated or in molten form. The OESs, as approved by the Health and Safety Commission (REF 1), are given below:

SUBSTANCE	OCCUPATIONAL EXPOSURE	STANDARD
	Long-term exposure limit 8-hour TWA	Short-term Exposure Limit 15 min ref period
Limestone	10 mg/m <sup>3</sup> total inhalable dust 4 mg/m <sup>3</sup> respirable dust	
Kaolin	2 mg/m <sup>3</sup> respirable dust	
Quartz (Crystalline Silicon)	0.3 mg/m <sup>3</sup> respirable dust	
Asphalt, petroleum fumes	5 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Hydrogen Sulphide	14 mg/m <sup>3</sup>	21 mg/m <sup>3</sup>

- NOTES:**
1. Long-term exposure to concentration levels above OES values may result in adverse health effects.
  2. Kaolin and quartz are present as constituents of china clay.

**HAZARDS IDENTIFICATION**

The products are not classified for supply purposes. They may, however, be delivered and are used at elevated temperatures above 100 °C, and should be handled accordingly. The major hazard is skin burns from contact with the hot product. When used in an enclosed environment, adequate ventilation should be provided.

## Mastic Asphalt (PASDS 01)

Product Ref: (DsC6-0209)

Issue No: 2

### 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 an elevated temperature.

**Skin:** In the event of contact with hot Mastic Asphalt, immediately cool affected part under cold running water for at least 10 minutes. Once cooled, residual Mastic Asphalt adhering to the skin should not be removed as it provides a sterile barrier which will detach itself after a few days. If the product has to be removed, use warm medicinal liquid paraffin. Do not use solvents. All burns should receive medical attention.

**Eyes:** Hot Mastic Asphalt splashed into the eye should be cooled immediately by irrigating with cold running water for 10-15 minutes. In the event of any product remaining try to remove only by continued irrigation with water. Obtain immediate medical attention.

**Inhalation:** Remove to fresh air if any ill effects are experienced. Rest and keep warm.

**Ingestion:** In the unlikely event of ingestion, do not induce vomiting. Obtain immediate medical advice.

### FIRE-FIGHTING MEASURES

In the event of a fire, wear protective clothing. In confined areas fire-fighters should wear self-contained breathing apparatus. Extinguish fire with foam, dry powder, water fog, sand or earth. Do not use water jets.

### ACCIDENTAL RELEASE MEASURES

No problem at ambient temperature when product is solid. Prevent molten product from flowing by containing with sand, earth or other suitable inert material. Do not allow to enter drains, watercourses etc. Allow to cool and dispose of in accordance with national and local regulations.

### HANDLING AND STORAGE

When Mastic Asphalt is supplied in block form on pallets, it should be noted that the pallets and strapping are not sufficient for safe crane handling. Special purpose lifting tackle and caging or netting are required in accordance with current safety regulations. Blocks should be transported in high sided vehicles or netted. When removing the tensioned strapping from pallets, eye protection (see Section 8) should be worn. Similar protection should be worn when breaking blocks with a hammer prior to melting.

Pallets of Mastic Asphalt blocks should be placed on a solid, even base. Double stacking of pallets is not recommended. Some deformation of Roofing, Paving and Tanking grade blocks may occur at high ambient temperatures.

Heating and melting Mastic Asphalt should be carried out to the agreed procedures under the Working Rule Agreement. The "hot charge" product is delivered at a maximum temperature of 230°C. When handling hot mastic, use personal protective equipment (see Section 8) to avoid contact with skin and eyes.

### EXPOSURE CONTROLS/PERSONAL PROTECTION

Advice applicable when handling the product at elevated temperatures.

**Precautionary Measures:** Wear suitable protective clothing when handling the product (see below). Ensure adequate ventilation.

#### Langley Waterproofing Systems Limited

Bishop Crewe House, North Street, Daventry, Northants. NN11 4GH

Tel: 01327 704778 Fax: 01327 704845 www.langley.co.uk

## Mastic Asphalt (PASDS 01)

Product Ref: (DsC6-0209)  
Issue No: 2

- Respiratory Protection:** Wear approved HSE respiratory protective equipment if exposure levels of vapours and fumes emitted from the hot product are above the occupational exposure limits.
- Hand/Skin Protection:** Wear heavy-duty protective gloves, overalls and footwear when handling the product. Trousers should not be tucked into top of boots. Barrier creams are beneficial in cleaning any product from the skin, but are not a substitute for gloves. Wash hands thoroughly before eating or drinking and maintain good standards of personal hygiene. Contaminated clothes should be laundered before re-use.
- Eye Protection:** Where there is a risk of damage to the eyes/face from splashing of hot product or impact, wear eye/face protection to BS 2092 (grade of protection according to risk involved).

## PHYSICAL AND CHEMICAL PROPERTIES

Appearance (at ambient temperature): black solid Relative Density (at 15°C): 2.0 - 2.4 Flash point: >300

## STABILITY AND REACTIVITY

These products are stable under normal storage conditions.

## TOXICOLOGICAL INFORMATION

- Skin/Eyes:** The products present no acute health hazard to skin or eyes other than burning when handled at elevated temperatures.
- Inhalation:** At ambient temperature there is no hazard. At elevated temperatures, bitumen fumes will be given off which can cause irritation to the respiratory system. The concentration of emitted vapours must be kept below the occupational exposure standards. Bitumen fumes may contain polycyclic aromatic hydrocarbons but these are of high molecular weight and boiling point and are more complex ring systems than those considered to be potential carcinogenic hazards (REF 2). Recent reports have concluded from the available information, knowledge and experience that: (i) Bitumen is of a low order of toxicity (ii) There is no evidence from laboratory tests or human experience that bitumen is associated with long-term effects in man from normal use over extended periods.
- Ingestion:** Ingestion is considered unlikely and toxicity is of a very low order.

## ECOLOGICAL INFORMATION

The products are not biodegradable. They are unlikely to cause long term effects in the aquatic environment.

## DISPOSAL CONSIDERATIONS

Dispose of in accordance with national and local regulations.

## TRANSPORT INFORMATION

Not classified as dangerous for transport.

### Langley Waterproofing Systems Limited

Bishop Crewe House, North Street, Daventry, Northants. NN11 4GH

Tel: 01327 704778 Fax: 01327 704845 www.langley.co.uk

## Mastic Asphalt (PASDS 01)

Product Ref: (DsC6-0209)  
Issue No: 2

### REGULATORY INFORMATION

Not classified as hazardous for supply. No statutory label required.

### OTHER INFORMATION

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

The information contained in this data sheet does not constitute an assessment of workplace risk as required by current legislation. Whilst every care is taken to see that the information is correct and up to date, it is not intended to form part of any contract or give rise to any collateral liability, which is hereby specifically excluded.

#### Langley Waterproofing Systems Limited

Bishop Crewe House, North Street, Daventry, Northants. NN11 4GH

Tel: 01327 704778 Fax: 01327 704845 [www.langley.co.uk](http://www.langley.co.uk)