SAFETY DATA SHEET

Mastic Asphalt Coloured Paving Grades

This Safety Data Sheet contains information concerning the potential risks to those involved in handling, transporting and working with the material, as well as describing potential risks to the consumer and the environment. This information must be made available to those who may come into contact with the material or are responsible for the use of the material. This Safety Data Sheet is prepared in accordance with formatting described in the REACH Regulation (EC) No 1907/2006, and described in CLP Regulation (EC) No 1272/2008.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Mastic Asphalt Paving Grades

553	Modified BS1447 S type T50 Red 25-35% gritted
554	Modified BS1447 S type T50 Red 30-50% gritted
561	Modified BS1447 Grade S Green ungritted
562	Modified BS1447 Grade S Green 20-30% gritted
572	Modified BS1447 Grade S Blue 20-30% gritted

1.2 Relevant identified uses of the substance or mixture and uses advised against

Hot applied coloured mastic asphalt for paving

1.3 Details of the supplier of the safety data sheet

Pure Asphalt
Burnden Road
Bolton
BL3 2RD

1.4 Emergency telephone number

Tel: +44 (0)1204 523244 Opening Times: 0900 - 1600 Monday to Friday

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification in accordance with the Dangerous Preparations Directive 1999/45/EC
Not classified as hazardous

Classification in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008
Not classified as hazardous

2.2 Label elements
Labelling in accordance with the Classification Labelling and Packaging Regulation EC (no) 1272/2008
No label required

2.3 Other hazards
As supplied in blocks, the product is not considered hazardous.
Product may 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.

Bitumen products may evolve hydrogen sulphide when heated. Hydrogen sulphide is a highly toxic gas which may collect in storage containers and enclosed spaces.

SECTION 3: Composition

3.1 Substances
Not applicable, product is a mixture.

3.2 Mixtures
A mixture of fine and coarse limestone aggregate and bitumens. Some grades may also contain Trinidad Lake Asphalt. Igneous aggregate may also be added dependent on application, as well as a colouring pigment
None of the components are classified as hazardous in accordance with the CLP Regulation (EC) no 1272/2008.

SECTION 4: First Aid Measures

4.1 Description of first aid measures
EYE CONTACT: For contact with cold material, e.g. dust particles, wash thoroughly with water and obtain medical attention if signs of discomfort persist. In case of contact with hot material, flood eye with copious quantities of cold water for 10-15 minutes. Do not try to remove material adhering to the eye. Cover the burn area loosely with a sterile dressing, if available. Seek immediate medical attention.
SKIN CONTACT: For contact with hot material, cool the affected area under cold running water for at least 10 minutes. Do not attempt to remove anything from the burn area or apply burn creams or ointments. Material adhering to skin will form a sterile barrier which will fall off after a few days. Cover the burn area loosely with a sterile dressing, if available. Seek immediate medical attention.
INHALATION: Remove from exposure. If breathing becomes difficult seek medical assistance.
INGESTION: If swallowed, rinse mouth with water.

4.2 Most important symptoms and effects, both acute and delayed
Thermal burns from contact with hot material.

4.3 Indication of any immediate medical attention and special treatments needed
Symptomatic treatment as required for thermal burns. Do not try to remove material adhering to the skin unless necessary to allow breathing or circulation. If removal is necessary, use soft paraffin or mineral oil to soften the material. Do not use solvents.

SECTION 5: Firefighting Measures

5.1 Extinguishing media
Use water fog, foam, dry powder, sand or earth to extinguish fires. Do not use water jets.

5.2 Special hazards arising from the substance or mixture
Water in contact with elevated temperature material may cause violent splattering and boiling. Fires involving asphalt will give off smoke containing complex hydrocarbons, carbon dioxide and carbon monoxide,

5.3 Advice for fire fighters
Fire fighters should wear thermal protective clothing and positive pressure self-contained breathing apparatus.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

For releases involving hot product, wear boots, protective clothing, gloves giving thermal protection, and eye protection. Respiratory protection may be necessary in poorly ventilated spaces.

6.2 Environmental precautions
Prevent entry into drains, sewers and watercourses as the material may be difficult to remove once cooled and cause blockages.

6.3 Methods and materials for containment and clearing up
No problem at ambient temperature when product is solid.
Prevent molten product from flowing by containing with sand, earth or other suitable inert material.
Scrape up and collect for disposal.

6.4 References to other sections
See section 8 for further advice on protective clothing and section 13 for advice on disposal.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling
Do not overheat. Use outside or in well ventilated areas. Wash hands thoroughly after using and before eating or drinking.

7.2 Conditions for safe storage, including any incompatibilities
Pallets of asphalt blocks should be placed on a solid, even base. Double stacking of pallets is not recommended.

7.3 Specific end uses(s)
Heating and melting 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 asphalt use personal protective equipment (see Section 8) to avoid contact with skin and eyes.

Grinding, cutting, etc. of hardened asphalt may release dusts which contain inhalable silica. Prolonged and/or excessive exposure to respirable dust may cause mucous membrane and respiratory irritation and lung injury with symptoms of shortness of breath and reduced pulmonary function. Inhalation of dust may cause irritation of nose, throat and respiratory passages.

SECTION 8. Exposure Controls/Personal Protection

8.1 Control parameters

Substance	8 hour exposure limit	15 minute exposure limit	Source, Type
Asphalt, petroleum fumes	5 mg/m^3	10 mg/m^3	EH40, 2007
Hydrogen sulphide	5 ppm (7 mg/m^3)	10 ppm (14 mg/m^3)	EH40, 2007

8.2 Exposure controls

Engineering controls
Ensure adequate ventilation if used in an enclosed space.

Respiratory protection
Wear approved respiratory protective equipment if exposure levels of vapours and fumes emitted from the hot product are above the occupational exposure limits.

Hand Protection
Wear heavy duty heat resistant protective gloves when handling the product. 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.

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 EN166.

Skin protection
Wear protective overalls and footwear providing heat protection. Trousers should not be tucked into top of boots.
Contaminated clothes should be laundered before re-use.

Environmental Exposure Controls
Take suitable measures to prevent entry into drains, sewers and watercourses when using molten product.

SECTION 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	Blue, Green or Red - solid (at ambient temperature)
Odour:	Bituminous odour
Odour threshold:	Not determined
pH:	Not applicable
Melting point:	Softens above 60°C
Boiling point:	> 300°C
Flashpoint:	> 300°C
Evaporation rate:	Not applicable
Flammability:	Not flammable
Upper/lower flammability limits:	Not flammable
Vapour pressure:	Negligible at 20°C
Vapour density:	Not determined
Relative density:	2.0-2.4 at 15°C
Solubility in water:	Negligible
Solubility in other solvents:	Not determined
Partition coefficient (log Kow):	Not determined
Autoignition temperature:	> 300°C
Decomposition temperature:	> 300°C
Viscosity:	Not applicable
Explosive properties:	Not classified as explosive
Oxidising properties:	Not classified as oxidising

9.2 Other information
None

SECTION 10: Stability and Reactivity

10.1 Reactivity
Not considered to be a reactive material.

10.2 Chemical stability
Stable under normal conditions of use.

10.3 Possibility of hazardous reactions
None expected under normal conditions of use.

10.4 Conditions to avoid
Avoid heating above recommended working temperatures as this may result in the release of toxic and irritating fumes.

10.5 Incompatible materials
Strong oxidising agents.
Do not add water to molten product as this may cause splattering of hot material

10.6 Hazardous decomposition products

None under normal conditions of use. If overheated may decompose and release hydrogen sulphide, and flammable and irritating hydrocarbon fumes.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

(a) acute toxicity	Oral and dermal toxicity are expected to be of a very low order, based on consideration of components. Inhalation of fumes may result in irritation, especially if the product is overheated above recommended temperatures.
(b) skin corrosion/irritation	The products present no acute health hazard to skin or eyes other than burning when handled at elevated temperatures.
(c) serious eye damage/irritation	The products present no acute health hazard to skin or eyes other than burning when handled at elevated temperatures.
(d) respiratory/skin sensitisation	Not considered to be a skin or respiratory sensitiser.
(e) germ cell mutagenicity	Not considered to be germ cell mutagen.
(f) carcinogenicity	Bitumen may contain substances including polyaromatic hydrocarbons (PAHs), some types of which have been associated with cancer. However, long-term studies of bitumen and asphalt workers have not demonstrated any increased cancer risk from the use of these products, and bitumen has been classified by IARC as Group 3, Not classifiable as to its carcinogenicity to humans.
(g) reproductive toxicity	Not considered to be a reproductive toxin.
(h) STOT-single exposure	Inhalation of fumes may result in irritation, especially if the product is overheated above recommended temperatures.
(i) STOT-repeated exposure	Paving grades of asphalt contain aggregates including silica, which is classified for repeated exposure toxicity because of the possibility of lung damage (silicosis) from long term inhalation. This silica is not normally inhalable when the asphalt is being applied.
(j) aspiration hazard	Not applicable.

SECTION 12: Ecological Information

This product has not been tested. Judgements on the expected toxicity of this product have been made based upon consideration of its major components.

12.1 Toxicity

Not expected to have any toxic effects in the environment.

12.2 Persistence and degradability

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

12.3 Bioaccumulative potential

These products are considered to be of low risk for bioaccumulation.

12.4 Mobility in soil

Not expected to be mobile. Low solubility in water. Product will harden once cooled, and will sink if it enters watercourses.

12.5 Results of PBT and vPvB assessment

A PBT and vPvB assessment has not been carried out, but there is no indication that any of the components may be of concern.

12.6 Other adverse effects

None known.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods
Dispose of in accordance with local regulations. Hardened asphalt may be recovered and recycled.

SECTION 14: Transport Information

Not considered to be dangerous goods for transport when supplied in blocks.
Hot asphalt is not subject to the requirements of ADR in accordance with Special Provision 643.

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
All components are listed as existing substances in Europe

15.2 Chemical Safety Assessment
A Chemical Safety Assessment has not been carried out for this product.

SECTION 16: Other Information

Revision information:
This is the first SDS prepared to Regulation 453/2010.

List of Abbreviations used in this SDS:

CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging Regulation (EC) no 1272/2008
DSD	Dangerous Substances Directive 67/548/EEC
DPD	Dangerous Preparations Directive 1999/45/EC
EC	European Community/Commission
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) no 1907/2006
vPvB	very Persistent, very Bioaccumulative

References:
Component suppliers SDS
EH40, 2007

Method used for classification of mixtures:
Ingredient based approaches

R Phrases and H Statements used in Section 3
None

Training requirements for workers
Workers using elevated temperature products should receive appropriate training.

Version History
V1 – 9th November 2016 - First Issue, Pure Asphalt