# **MACRETE**

## PRODUCT SAFETY DATA SHEET

1	Identification of Substances and Company	A&M Macrete Sales Ltd
		Newmill
	Macrete deferred set macadam in 25kg bags	Milton of Campsie
		G66 8EH

## **Composition / Information on Ingredients**

Deferred set Asphalts are mixtures of aggregates and fluxed bitumens or bitumen emulsions, some of which may be recycled materials. The flux oil is petroleum based. The fluxing agent will usually be in the range of 0.7% - 1.5% of the mixture and will typically is around 1.2%. Water based emulsions will not exceed 10% of the mixture

**3** For further details of the specification refer to the relevant Technical Data Sheet.

#### 4 Hazards Identification

These products are **NOT** classified as **hazardous** in accordance with any statutory legislation such as CHIP. If used as intended we do not envisage any COSHH Risk Exposure Rating. The main hazards presented by Asphalt Deferred set products depends on the temperature of the material. Deferred set Asphalt containing flux has a typical maximum temperature of 120°C when mixed. Emulsion based products are mixed typically at ambient temperatures.

The following hazards may apply:

- Hot materials may burn the skin.
- Fumes from Asphalt Deferred Set are unlikely to be hazardous when laid in open air situations, but there
  may be a risk to health by continuous inhalation of high vapour concentrations which might arise in confined or
  semi-confined spaces.
- Emulsion from Asphalt Deferred Set products is unlikely to be hazardous when in contact with the skin since it rapidly converts to a cold bitumen film which is easily removable.

## 5 First Aid Measures

Inhalation - Immediately remove to fresh air. Seek medical attention.

**Skin Contact** - Burns caused by contact with hot material should be cooled by immediately drenching with cold water. The bitumen may then be removed under medical supervision.

Eye Contact - Irrigate with water for at least ten minutes. If pain persists seek medical attention.

Ingestion - Remove to fresh air and give water to drink. Seek medical advice.

## **Fire Fighting Measures**

Suitable Extinguishing Media - Dry powder, foam.

Unsuitable Extinguishing Media - CO<sup>2</sup>

**Special Exposure Hazards in Fire** - Hydrocarbon fumes may be released.

**Special Protective Equipment for Fire Fighters -** Full protective clothing including suitable respirator or

breathing apparatus.

## 6 Accidental Release Measures

**Personal Precautions** - Ensure the temperature of the Asphalt does not present a Safety Hazard. Wear overalls and gloves.

**Environmental Precautions -** Entry into watercourses should be avoided.

Methods for Cleaning - No Special requirements

# 7 Handling and Storage

**Handling** - Skin contact with hot materials should be avoided. Inhalation of fumes should be avoided as far as is reasonably practicable. **Storage** - No special requirements. Refer to the relevant Technical Data Sheet for the specific product.

## 8 Exposure Controls / Personal Protection

## **Take Measures to Prevent**

(a) Inhalation of dust.

(b) Inhalation of excessive quantities of dust during cutting or surface treatment of hardened asphalt.

## **Workplace Exposure Limits**

(a) Asphalt Fumes - W.E.L. 5mg/m³ 8 Hours T.W.A. 10mg/m³ 15 Min T.W.A. (b) Total Dust - W.E.L. 10mg/m³ 8 Hours T.W.A. Respirable Dust - W.E.L. 4mg/m³ 8 Hours T.W.A.

Respirable Quartz - W.E.L. 0.1mg/m<sup>3</sup> 8 Hours T.W.A.

W.E.L. = Workplace Exposure Limit T.W.A. = Time Weighted Average

**Respiratory Protection -** Suitable masks if dust / fume is present in significant quantities.

Hand Protection - Gloves.

Eye Protection - Goggles may be required.

Skin Protection - Overalls.

## 9 Physical & Chemical Properties

Appearance - Black, granular solid

Odour - Strong

pH - Neutral

Boiling Point / Range - not applicable

Melting Point / Range – not applicable

Flash Point - Above 200°C

Flammability - not determined

Auto Flammability - Above 230°C

Explosive Properties - Not determined

Oxidising Properties – Not determined

Vapour Pressure - Not applicable

Relative Density - above 2.0

Water Solubility - Insoluble

Fat Solubility - Not determined

## 10 Stability and Reactivity

Conditions to Avoid - Sources of ignition and temperatures above 200°C.

Materials to Avoid - Strong oxidising agents, e.g. chlorates which may be used in agriculture.

**Hazardous Decomposition Products** -The substances arising from the thermal decomposition of the bitumen binder in Asphalt will largely depend on the particular conditions but may contain the following:

Carbon Dioxide, Carbon Monoxide, Water, Particulate Matter,

Hydrogen Sulphide, Sulphur Oxides, Polycyclic Aromatic

Hydrocarbons, Unburnt Hydrocarbons, Nitrogen Oxides,

Vanadium Pentoxide.

## 11 Toxicological Information

Fumes inhaled over a prolonged period could constitute a health hazard. Prolonged skin contact may cause dermatitis.

## 12 Ecological Information

**Environmental Assessment** - When used and disposed of as intended, no adverse environmental effects are foreseen.

Mobility - Asphalts are non-volatile materials that will sink in water and form a solid layer on the surface of the ground.

Emulsion is mobilised when in contact with water, however the material quickly separates into bitumen and water.

**Persistence and Degradability** - Asphalts are resistant to degradation and will persist in the environment for a considerable period of time.

Ecotoxicity - Not expected to be toxic to aquatic organisms when used as intended. Emulsions are typically acidic.

## 13 Disposal Consideration

Likely Residues / Waste Product - Asphalt is an inert material; however please refer to local and national requirements.

Safe Handling of Residues / Waste Product - Aggregates are inert but should be disposed of in accordance with local and national legal requirements.

## 14 Transport Information

Special Carriage Requirements - None - keep covered

## 15 Regulatory Information

This product is NOT classified as dangerous for transport.

Where RAP material is used as a feed product i.e. road plannings/recycled asphalt then it has been registered under REACH (Bitumen constituent).

## 16 Other Information

Training Advice - Wear and use of PPE.

Recommended Uses and Applications - Industrial and construction applications

Further Information - Health, Safety & Environmental Manager, Tillicoultry Quarries Limited - Telephone: (01324 821221)

# **Key Data Used to Compile Data Sheet**

**HSE Guidance Note EH40** 

PPE Regulations (Amended)

**COSHH Regulations (Amended)** 

**Environmental Protection Act** 

**REACH Regulations**