

# **SAFETY DATA SHEET**

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) 453/2010

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

#### 1.1. Product identifier

Product Name PatchMaster H575

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

Identified UsesAsphalt - Deferred setUses advised againstRefer to Product Data Sheet

## 1.3. Details of the supplier of the safety data sheet

Supplier Meon Ltd.

Railside

Northarbour Spur Portsmouth PO6 3TU

+44 (0) 23 9220 0606 mail@meonuk.com

# 1.4. Emergency Telephone Number

**Emergency telephone** +44 (0) 808 118 1922

## **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

NOT classified as dangerous in accordance with Directive 67/548/EEC or EC 1272/2008.

However, please note the following:

Deferred set asphalt contains flux oil, which may be present in quantities of up to approximately 2%. Flux oil in liquid state carries a risk of aspiration, which can lead to rapid and possibly fatal lung damage, and has the hazard classification:

Xn R-65 Harmful: may cause lung damage if swallowed' (In accordance with Directive 67/548/EEC)

GHS08 Health Hazard H304: May be fatal if swallowed and enters airways (in accordance with Regulation (EC) 1272/2008)

Once the flux oil is mixed with bitumen and aggregate, it is not expected to be likely to enter the lungs, so the finished product 'Deferred Set Asphalt' is not classified as dangerous. The following additional hazards should also be considered:

Deferred set asphalt is produced at elevated temperatures (up to a typical maximum of 120 °C).

Hot materials may burn the skin.

Fumes from Asphalt 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 poorly ventilated, confined or semi-confined spaces. Dusts containing Respirable Crystalline Silica\* (quartz) present a greater hazard. Long-term exposure to respirable dust can lead to respiratory system damage and disease. Respirable crystalline silica has been associated with the lung disease silicosis. The quartz content of the product will vary, and is related to the type of aggregate used in the production of the asphalt. Advice on the quartz content and other chemical information is available from the supplying unit.

Any references to respirable silica only apply if hardened asphalt is cut, drilled, milled or planed.

**Classification according to** Not classified.

Regulation (EC) 1272/2008

Classification according to Not classified.

Directive 67/548/EEC

2.2. Label Elements

**Labelling according to Regulation** Not required - not classified as hazardous.

(EC) 1272/2008

**Labelling according to Directive** Not required - not classified as hazardous.

67/548/EEC

2.3. Other hazards

No other hazards identified.

# **SECTION 3: Composition/information on ingredients**

### 3.1. Substances

### 3.2. Mixtures

Deferred set asphalt is a mixture of aggregate and fluxed bitumen or bitumen emulsions. Bitumen is a hydrocarbon derived from the distillation of petroleum crude oil, but may be synthetic or modified by the use of polymers and other chemicals. Flux oil added to the bitumen is usually petroleum based, and will typically be in the range of 0.7 to 1.8% of the finished product. Water based emulsions will usually be <10% of the finished product. Other additives may use to modify the characteristics of the finished product. Aggregates used in asphalt may naturally occurring (e.g. limestone, gritstone, granite, sand etc.), artificial (e.g. slag aggregates) or recycled (e.g. road plainings, inert construction and demolition waste, glass etc.).

**Hazardous ingredients** 

Substance name	EC No.	DSD Classification	CLP Classification	%
Hydrocarbons, C15-C20, n-alkanes, isoalkanes, cyclics, <0.03% aromatics	934-956-3	Xn; R65	H304 - Asp. Tox. 1	0.7 - 1.8
Crystalline Silica*	238-878-4	Xn; R48/20	H372 - STOT RE1	Variable

## **SECTION 4: First aid measures**

As a general rule, in case of doubt or if symptoms persist, always call a doctor. NEVER induce swallowing by an unconscious person.

# 4.1. Description of first aid measures

**Inhalation** Immediately remove to fresh air. If breathing difficulties are experienced, seek medical

attention. If breathing has stopped, commence artificial resuscitation and seek medical

attention immediately.

**Ingestion** Do not induce vomiting to avoid the risk of material entering the respiratory tract

(aspiration). Get immediate medical attention.

**Skin contact** Burns caused by contact with hot material should be cooled by immediately flushing with

large amounts of cold water. Do not attempt to remove anything from the burn area unless required to allow breathing. Seek medical attention. Bitumen may be removed under medical supervision. If skin contact if made without burns, remove soiled clothing

and wash skin with soap and water.

**Eye contact** If material is hot, apply the same measures as 'skin contact' above. If the material is cold,

Immediately and thoroughly irrigate with eye wash solution or clean water. If symptoms

develop or persist, seek medical attention.

**Aspiration** If the product is believed to have entered the lungs (e.g. as a result of vomiting), take the

person to hospital immediately for medical treatment.

# 4.2. Most important symptoms and effects, both acute and delayed

None other than advice given above.

## 4.3. Indication of any immediate medical attention and special treatment needed

None other than advice given above.

### **SECTION 5: Firefighting measures**

Flammable. Chemical powders, carbon dioxide and other extinguishing gas are suitable for small fires.

5.1. Extinguishing media

Suitable extinguishing media

Dry powder, foam.

Unsuitable extinguishing

Do not use water. CO2 is also not suitable.

media

fire fighters

5.2. Special hazards arising from the substance or mixture

**Explosion hazard** Hydrocarbon fumes may be released, along with other hazardous combustion products

including smoke.

5.3. Advice for firefighters

Special protective equipment for

Proper protective equipment including suitable respirators or breathing apparatus must

be worn

**SECTION 6: Accidental release measures** 

6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Wear overalls, heat resistant safety boots and heat resistant, impervious gloves. Wear

suitable respiratory protection in poorly ventilated or enclosed areas. Keep away from ignition sources. See Section 8 for guidance on personal protective equipment. See

Section 7 for guidance on handling the product.

6.2. Environmental precautions

**Environmental precautions** Prevent asphalt from entering watercourses, ditches and drains.

6.3. Methods and material for containment and cleaning up

**Clean-up procedures** Scrape up using suitable mechanical methods. Bitumen may be removed from tools and

machinery with a proprietary bitumen remover, but ensure you refer to the suppliers

safety data sheet before using.

6.4. Reference to other sections

Reference to other sections For more information on exposure controls/personal protection or disposal

considerations, please check section 8 and 13 and the Appendix of this safety data sheet.

**SECTION 7: Handling and storage** 

Requirements relating to storage premises apply to all facilities where the mixture is handled.

7.1. Precautions on safe handling

**Protective Measures** Skin contact with the product should be avoided. Avoid breathing in vapours or fumes.

If the formation of vapours is a risk, then additional ventilation should be provided. Handle away from sources of ignition and heat. Do not smoke, eat or drink during use.

7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions** Keep away from heat. Use only hydrocarbon resistant containers. Asphalt is normally

used upon receipt. Refer to the relevant Technical Data Sheet for the specific product.

7.3. Specific end use(s)

Specific end use(s) N/a.

**SECTION 8: Exposure controls/personal protection** 

8.1. Control parameters

**Take Measures to Prevent** (a) Inhalation of vapours/fumes.

(b) Inhalation of excessive quantities of dust during cutting, drilling, planning or surface

treatment of hardened asphalt.

(c) Accidental ingestion of product.

**Exposure Control Limits / Source** 

(a) Asphalt Fumes WEL 5 mg/m<sup>3</sup> 8 hrs TWA

10 mg/m<sup>3</sup> 15 min TWA

Oil Mist (flux oil) WEL 5 mg/m³ 8 hrs TWA
(b) Total Dust WEL 10 mg/m³ 8 hrs TWA

Respirable Dust Respirable Quartz (Crystalline Silica\* SiO2) WEL 4 mg/m<sup>3</sup> 8 hrs TWA WEL 0.1 mg/m<sup>3</sup> 8 hrs TWA

WEL = Workplace Exposure Limit TWA = Time Weighted Average

8.2. Exposure controls

**Inhalation** S51 - Use only in well-ventilated areas.

**Eyes, Skin & Hands** S36/37/39 - Wear suitable protective clothing, gloves and eye / face protection.

Control measures

Dust caused by cutting or planning hardened asphalt should be controlled by containment, suppression and extraction/ filtration where possible. Deferred set asphalt

should only be laid in well ventilated areas.

**Respiratory protection** 

Always ensure adequate ventilation and avoid breathing vapour/fumes. Suitable respiratory protection should be used if required to ensure exposure is below the Workplace Exposure Levels given at the start of this section.

**Hand protection** Liquid-proof aliphatic solvent resisting, heat resistant gloves should be worn.

**Eye protection** Goggles should be worn if there is a risk of product entering the eyes (including dust).

**Skin protection**Overalls and/or long-sleeved jackets and full length trousers should be worn to protect

skin from burns. Clean overalls as necessary to prevent product permeating to clothing or  $% \left\{ 1\right\} =\left\{ 1\right\} =$ 

skin underneath.

Heat resistant safety boots should be worn. The use of skin barrier cream is also

recommended.

Hands should be washed thoroughly before handling or eating food or drink.

## **SECTION 9: Physical and Chemical Properties**

### 9.1. Information on basic physical and chemical properties

AppearanceBlack, granular solidOdourStrong, characteristic

**pH** Neutral

Boiling point / range Not applicable Melting point / range (°C) 90 - 100 Flash point (°C) Above 200 Auto flammability (°C) Above 230 **Flammability** Not determined **Explosive properties** Not determined **Oxidising properties** Not determined Not applicable Vapour pressure **Relative density** Above 2.0 Water solubility Insoluble Fat solubility Not determined

9.2. Other information

None available.

### **SECTION 10: Stability and reactivity**

10.1. Reactivity

10.2. Chemical stability

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

**Conditions to avoid** Sources of ignition and temperatures above 130 °C.

10.5. Incompatible materials

Materials to avoid Strong oxidizing agents, e.g. chlorates which may be used in agriculture.

10.6. Hazardous decomposition products

Hazardous decomposition

products

The substances arising from the thermal decomposition of the bitumen binder and flux oil used in deferred set asphalt will largely depend on the particular conditions but may contain the following: Hydrogen Sulfide, Carbon Dioxide, Carbon Monoxide, Water, Particulate Matter (including soot), Sulphur Oxides, Polycyclic Aromatic Hydrocarbons, Unburnt Hydrocarbons, Nitrogen Oxides, Aldehydes, Vanadium Pentoxide.

SECTION 11: Toxicological information

## 11.1. Information on toxicological effects

Inhalation Inhalation of respirable dust from aggregate contained in asphalt whilst cutting or

plaining hardened asphalt can lead to respiratory system damage and disease. Inhalation of fumes over a prolonged period may cause irritation of the respiratory system. Bitumen used in deferred set asphalt may release small amounts of hydrogen sulfide gas.

With good general ventilation, this is not likely to cause any problems, but in poorly

ventilated enclosed spaces, concentrations may build up to hazardous levels.

**Ingestion** Ingestion is very unlikely, but if swallowed, flux oil in the product may enter the lungs

and lead to rapid and serious lung damage through pulmonary lesions. Seek medical

attention immediately. Medical survey for at least 48 hrs.

**Skin contact** Prolonged skin contact may cause dermatitis and malignant warts. Contact with hot

asphalt may cause burns.

**Eye contact** Product entering the eyes may cause irritation. Contact with hot asphalt may cause

burns.

**SECTION 12: Ecological information** 

Environmental Assessment When used and disposed of as intended, no environmental effects are foreseen, and

asphalt should not pose an ecological hazard.

12.1. Toxicity

**Ecotoxicity (flux oil)** Acute toxicity. LC50 96 hours fish > 100 mg/l

Biodegradability. OECD 306 test. 28 days 74 %.

12.2. Persistence and degradability

Persistence and degradability Resistant to degradation and will persist in the environment.

12.3. Bioaccumulative potential

12.4. Mobility in soil

**Mobility** Low mobility. Will sink in water and form a solid layer on the surface of the ground. Flux

oil component will spread on water.

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

# **SECTION 13: Disposal considerations**

Proper waste management of the mixture and/or its container must be determined in accordance with Directive 2008/98/EC.

#### 13.1. Waste treatment methods

Waste disposal recommendations Asphalt made with bitumen is classed as 'non-hazardous' but should be disposed of in

accordance with local and national legal requirements. Hardened asphalt can be readily

recycled.

**5** | 7

#### **SECTION 14: Transport information**

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for Air Transport (ADR 2013 - IMDG 2012 - ICAO/IATA 2014).

## **Special Carriage Requirements**

Not classified as dangerous for transport.

Product should be kept covered. Flammable materials, and containers that do or may become pressurised should be kept away from hot asphalt to avoid the risk of fire and explosion.

#### 14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL3/78 and the IBC Code

### **SECTION 15: Regulatory information**

# 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Classification: Not classified as dangerous.

However, consideration of the following risk & safety phrases/ hazard statements is recommended:

67/548/EEC

**Risk Phrases** R34 - May cause burns.

R36/37 - Irritating to eyes and respiratory system.

Safety Phrases S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

S51 - Use in well ventilated areas.

EC1272/2008

Hazard Statements H304 - May be fatal if swallowed and enters airways

H317 - May cause skin irritation

H335 - May cause respiratory irritation

H372 - Causes damage to organs through prolonged or repeated exposure (if exposed to respirable silica that may be released if hardened asphalt is cut, drilled, milled or planed.)

**Precautionary Statements** P102 - Keep out of reach of children

P261 - Avoid breathing dust/fume/vapours.

P271 - Use only outdoors or in a well-ventilated area.

P281 - Use personal protective equipment as required (see Section 8)

# 15.2. Chemical safety assessment

#### **SECTION 16: Other info**

Training Advice

Wear and use of PPE.

**Recommended Uses and** 

Industrial and construction applications.

Applications

**Further Information** Contact Product Technical Support using the details given in Section 1.

HSE Guidance Note EH40/2007

PPE Regulations 1992 COSHH Regulations 2002

Environmental Protection Act 1990

**HSE Crystalline Silica EH59** 

Dangerous Substances Directive (DSD) 67/548/EEC

**6** | 7

Classification, Labelling and Packaging Regulations (CLP) EC1272/2008

Prepared in accordance with Annex II of the REACH Regulation (EC) 1907/2006.

# Disclaimer

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**7** | 7