



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 H570

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

Identified Uses Asphalt - Deferred set
Uses advised against No information available.

1.3. Details of the supplier of the safety data sheet

Supplier MHL Group, (Trading name of Meon Ltd.)
 Railside
 Northharbour 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: PCSM 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 'PCSM Asphalt' is not classified as dangerous.

The following additional hazards should also be considered: PCSM 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.

PatchMaster H570

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

2.3. Other hazards

No other hazards identified.

SECTION 3: Composition/information on ingredients

3.1. Substances

3.2. Mixtures

PCSM 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 be used 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 planings, 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

PatchMaster H570

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 media	Do not use water. CO2 is also not suitable.

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.
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5.3. Advice for firefighters

Special protective equipment for fire fighters	Proper protective equipment including suitable respirators or breathing apparatus must be worn.
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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.
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6.2. Environmental precautions

Environmental precautions	Prevent asphalt from entering watercourses, ditches and drains.
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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 supplier's safety data sheet before using.
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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.
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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.
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SECTION 8: Exposure controls/personal protection

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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 ³	8hrs	TWA
	WEL	10 mg/m ³	15 mins	TWA
Oil Mist (flux oil)	WEL	5 mg/m ³	8hrs	TWA
(b) Total Dust	WEL	10 mg/m ³	8hrs	TWA
Respirable Dust	WEL	4 mg/m ³	8hrs	TWA
Respirable Quartz (Crystalline Silica* SiO ₂)	WEL	0.1 mg/m ³	8hrs	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



Impermeable, heat resisting 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 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

Appearance	Black, granular solid
Odour	Strong, 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
Vapour pressure	Not applicable
Relative density	Above 2.0
Water solubility	Insoluble
Fat solubility	Not determined

9.2. Other information

No information 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

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11.1. Information on toxicological effects

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

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).

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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 information

Training Advice

Wear and use of PPE.

Recommended Uses and Applications

Industrial and construction 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

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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This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.