SAFETY DATA SHEET

G101-123 HOT POUR BITUMEN COMPOUND

ISSUE DATE: **1**
ISSUE DATE: **6th January 2020**

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

1.1 Product identifier

G101-123 hot pour bitumen compound

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

Encapsulating medium / sealant for power cable joints and terminations

1.3 Details of the supplier of the safety data sheet

Company information:	Prysmian Cables and Systems Ltd Oak Road, Wrexham Industrial Estate, Wrexham LL13 9PH
Telephone:	+44 (0)1978 66 2375
e-mail:	dave.lamb@prysmian.com

1.4 Emergency telephone number: +44 (0)1978 66 2216

Section 2 : Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (EU "CLP" Regulation):
Not classified as hazardous.

2.2 Label elements

Labelling according to Regulation (EC) 1272/2008 (EU "CLP" Regulation):
No labelling requirements

2.3 Other hazards

None

Section 3 : Composition / information on ingredients

Hydrogen sulphide may accumulate at hazardous concentrations in confined spaces.

No classified ingredients or those having occupational exposure limits.

REACH Registration : 01-2119480172-44 CAS: 8052-42-4 EC: 232-490-9

Section 4 : First aid measures

4.1 Description of first aid measures

Eye Contact:
HOT PRODUCT – If hot product enters the eye rinse carefully with cold running water to dissipate heat. Obtain medical advice / treatment immediately.
COLD PRODUCT – Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation, swelling or blurred vision persists.

Inhalation:
If there is any suspicion of hydrogen sulphide inhalation remove casualty to fresh air as soon as possible. Begin artificial respiration if breathing has ceased, providing oxygen may help. Obtain medical advice.

Skin Contact:
HOT PRODUCT – The affected area should be should be plunged immediately into cold running water. Do not attempt to remove material adhered to the skin at the worksite. Do not attempt to remove areas of clothing adhered to burnt skin but cut around them. Never use solvent materials for washing of contaminated skin. Seek medical attention in all cases of serious burns.
COLD PRODUCT – Wash contaminated skin with soap and water.

Ingestion:
Do not induce vomiting. Seek medical attention if symptoms occur. Never give anything by mouth to an unconscious person. Remove victim to fresh air and keep at rest in a position comfortable for breathing

4.2 Most important symptoms and effects, both acute and delayed

Eye Contact - HOT PRODUCT will cause severe burns
COLD PRODUCT will cause minimal redness and irritation

Inhalation - Inhalation of oil mist or vapours at elevated temperatures may cause respiratory irritation

Skin Contact - Contact with hot / molten product will cause severe burns. Negligible effect at ambient temperature.

Ingestion - Few or no symptoms expected. If any, slight nausea may occur.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician – Treatment should in general be symptomatic and directed to relieving any effects. If for any reason the product must be removed, this can be done by using a slightly warmen medicinal liquid paraffin. Bitumen acts as a sterile layer and should only be removed by specialist medical care.

Section 5 : Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media – Dry chemical, CO_2, water spray (fog) or foam.
Do not use direct water jet on burning product as this could cause splattering and spread the fire.

5.2 Special hazards arising from the substance or mixture

In the event of a fire or if exposed to excessive heat the resultant pressure build up may result in bursting of the container. Respiratory problems or nausea may be caused by excessive exposure to hot product fumes.

Combustion products comprise solid and liquid particulate matter, hydrogen sulphide, oxides of sulphur and carbon monoxide.

5.3 Advice for firefighters

Remove all persons from the vicinity of the incident. Firefighters should wear appropriate protective equipment and self-contained breathing apparatus incorporating positive pressure face mask conforming to EN469.

Section 6 : Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Keep non-involved personnel away from the area of spillage. Alert emergency personnel . Except in case of small spillages, the feasibility of any actions should always be assessed and advised, if possible, by a trained, competent person in charge of managing the emergency. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind/keep distance from source. In case of large spillages, alert occupants in downwind areas.
Eliminate all ignition sources if safe to do so. Spillages of limited amounts of product, especially in the open air when vapours will be usually quickly dispersed, are dynamic situations, which will presumably limit the exposure to dangerous concentrations.

For emergency responders

Small spillages: normal antistatic working clothes are usually adequate. Wear suitable gloves. Splash goggles.

Large spillages: full body suit of chemically resistant and thermal resistant material should be used. Work gloves providing adequate chemical resistance, specifically to aromatic hydrocarbons. If contact with hot product is possible or anticipated, gloves should be heat-resistant and thermally insulated. Safety helmet with integrated full ace visor and neck protection. antistatic non-skid safety shoes or boots.

Respiratory protection :

A half or full-face respirator with filter(s) for organic vapours (and when applicable for H2S) a Self-Contained Breathing Apparatus (SCBA) can be used according to the extent of spill and predictable amount of exposure. If the situation cannot be completely assessed, or if an oxygen deficiency is possible, only SCBA's should be used.

6.2 Environmental precautions

Prevent product from entering drains / surface water / ground water. If necessary dike the product with dry earth, sand or similar non-combustible materials.

6.3 Methods and material for containment and cleaning up

Small spill - Stop leak if without risk. Absorb spilled product with suitable non -combustible materials. Collect solidified product with suitable means (e.g. shovels).

Large spill - When inside buildings or confined spaces, ensure adequate ventilation. Transfer collected product and other contaminated materials to suitable containers for recovery or safe disposal. Let hot product cool down naturally. If necessary, cautiously use water fog to help the cooling. Do not play direct jets of foam or water on the spilled molten product, as this may cause splattering.

6.4 Reference to other sections

See Section 13 for disposal information.

Section 7 : Handling and storage

7.1 Precautions for safe handling

Do not ingest. Do not breathe dust/fume/gas/mist/vapours/spray. Avoid contact with eyes, skin and clothing
Prevent the risk of slipping. Take precautionary measures against static discharge.
Avoid splash filling of bulk volumes when handling hot liquid product.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool dry location. Keep in original container re-sealed after use. Store separately from oxidising agents

7.3 Specific end use(s)

See Section 1.2

Section 8 : Exposure controls / personal protection

8.1 Control parameters

Occupational exposure limits

Product / ingredient name	Exposure limit values
Bitumen fume	EH40/2005 WELs (UK, 12/2011) STEL: 10mg/m^3 15 minutes TWA: 5mg/m^3 8 hours
Hydrogen Sulphide	EH40/2005 WELs (UK, 12/2011) STEL: 14mg/m^3 15 minutes STEL: 10ppm 15 minutes TWA: 7mg/m^3 8 hours TWA: 5ppm 8 hours

8.2 Exposure controls

Hand protection	Heat resistant gloves with long cuffs, or gauntlets (EN 374 - 407). Gloves must be periodically inspected and changed in case of wear, perforations or contaminations.
Body protection	Wear protective clothing for operations with hot material: heat resistant coveralls (with trousers legs over boots and sleeves over cuffs of gloves), heat resistant heavy duty antiskid boots (e. g. leather). Coveralls should be changed at the end of the work shift and cleaned as necessary to avoid transfer of product to clothes or underwear.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection	Approved respiratory protection equipment shall be used in spaces where hydrogen sulphide may accumulate: full face mask with cartridge/filter type "B" (grey for inorganic vapours including H2S) or self-contained breathing apparatus (SCBA).
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Section 9 : Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Solid at 20ºC
Colour:	Dark Brown. Black
Odour:	Bitumen
Odour Threshold:	Not applicable
pH:	Not applicable
Melting Point/Freezing Point:	Not available
Initial boiling point and boiling range	>320°C
Flash Point:	Closed Cup: >240°C Open Cup: >220°C (COC)
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not available
Upper/lower flammability or explosive limits	Not available
Vapour pressure	100 Pa @ 20°C
Density	0.99 to 1.10 g/cm^3 [25°C]
Solubility(ies)	Insoluble in water
Partition coefficient n-octanol/water	Not applicable
Auto-ignition temperature	> 300°C
Decomposition temperature	> 350°C
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not applicable
Softening point	50 to 58°C
Penetration	35 to 50 x 10-1 mm at 25°C (test method EN1426)

9.2 Other information

No additional data available

Section 10 : Stability and reactivity

10.1 Reactivity

Not reactive to materials commonly used in the transportation, handling and storage of industrial materials.

10.2 Chemical stability

Stable under normal temperature conditions

10.3 Possibility of hazardous reactions

Hazardous reactions unknown

10.4 Conditions to avoid

Avoid excessive heat for prolonged periods of time.

10.5 Incompatible materials

Store away from oxidising agents

10.6 Hazardous decomposition products

Incomplete combustion will generate oxides of in evolution of carbon, sulphur and nitrogen

Section 11 : Toxicological information

11.1 Information on toxicological effects

Product/ingredient name	Result	Species	Dose	Exposure
Bitumen	LC50 Inhalation Vapour	Rat	>94.4 mg/m^3	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	4 hours
	LD50 Oral	Rat	>5000 mg/kg	4 hours

No other known significant effects or critical hazards

Section 12 : Ecological information

12.1 Toxicity

No significant effects or critical hazards

12.2 Persistence and biodegradability

Not readily biodegradable

12.3 Bioaccumulative potential

Bioaccumulation is unlikely

12.4 Mobility in soil

Not mobile when cooled to a solid

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects

No data available

Section 13 : Disposal considerations

13.1 Waste treatment methods

Not hazardous waste

Waste product and used containers should be sent for disposal in accordance with local authority regulations by licensed operators(controlled incineration or controlled landfill.

Waste Code 05 01 17 (Bitumen)

Section 14 : Transport information

14.1 UN Number

The cold (solid) product is not classified as hazardous for transport

14.2 UN proper shipping name

The cold (solid) product is not classified as hazardous for transport

14.3 Transport hazard class(es)

The cold (solid) product is not classified as hazardous for transport

14.4 Packing group

The cold (solid) product is not classified as hazardous for transport

14.5 Environmental hazards

Not regulated under transport regulation.

14.6 Special precautions for user

For transport within users premises: Always transport in upright sealed con

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and IBC code

Not applicable to the cold (solid) material

Section 15 : Regulatory information

This Safety Data Sheet has been prepared in accordance with the requirements of regulation (EC) No 1907/2006 as amended by regulation (EU) No 453/2010.

Relevant regulations:

Regulation (EC) 1272/2008 (EU 'CLP' regulation)

Regulation (EC) No 1907/2006 ('REACH')

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

See above

15.2 Chemical safety assessment

A chemical safety assessment has not been undertaken for this material

Section 16 : Other information

This SDS is the first version of this SDS for this product.

This information is believed to be accurate and represents the best information available to the company at this time. This information is provided as a guide to the hazards and respective safety precautions relevant to this product. This MSDS does not represent any guarantee of performance or specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein