

Katepal BIP oxidised bitumen

SAFETY DATA SHEET

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

1.1 Product identifier

Product name	Katepal BIP oxidised bitumen BIP 95/35, BIP 100/30, BIP 100/25 BIP 105/25
EC number	265-196-4
CAS number	64742-93-4
Product description	Oxidised bitumen for roofing and industrial applications.
Product type	Cold product solid, warm product liquid.
Other means of identification	This material is a severely oxidized asphalt with a Penetration Index of > 2.0
MARPOL category	Asphalt solution
REACH Registration number	

Registration number	
01-2119498270-36-xxxx	

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

<p>Identified uses</p> <p>Manufacture of substance - Industrial Use as an intermediate - Industrial Distribution of substance - Industrial Formulation and (re)packing of substances and mixtures - Industrial Use as a fuel - Industrial Manufacture of articles - Industrial Use in construction applications - Industrial</p>

1.3 Details of the supplier of the safety data sheet

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National contact

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e-mail address of person responsible for this SDS katepal@katepal.fi

1.4 Emergency telephone number

National advisory body/Poison Centre

Telephone number Myrkytystietokeskus +358 9 471 977 (suora) tai +358 9 4711 (vaihe)

Hours of operation 24 hour service

Substance

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	UVCB
<u>Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]</u>	
Classification	Not classified.
<u>Classification according to Directive 67/548/EEC [DSD]</u>	
Classification	Not classified.

2.2 Label elements

Hazard pictograms	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
<u>Precautionary statements</u>	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.

2.3 Other hazards

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII	No.
Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	No.
Other hazards which do not result in classification	<p>Contact with hot/molten product will cause severe burns. Vapour from hot bitumen may be slightly irritant to the eyes and the upper respiratory tract.</p> <p>This material is a severely oxidized asphalt. It is not classified as hazardous, according to regulatory criteria. Animal studies indicate that repeated exposure to fumes may present a weak carcinogenic hazard (see section 11).</p> <p>Contains hydrogen sulphide or >0.5% sulphur. Both liquid and gas phase may contain hydrogen sulphide.</p>

SECTION 3: Composition/information on ingredients

Substance/mixture UVCB

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
Asphalt, oxidized	REACH #: 01-2119498270-36 EC: 265-196-4 CAS: 64742-93-4	100	Not classified.	Not classified.	[A]

Hydrogen sulphide can accumulate in tanks and confined spaces and reach potentially hazardous concentrations.

Type

- [*] Substance
- [A] Constituent
- [B] Impurity
- [C] Stabilising additive

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	<p>HOT PRODUCT: If hot product is splashed into the eye, it should be cooled down immediately to dissipate heat, under cold running water. Immediately obtain specialist medical assessment and treatment for the casualty.</p> <p>COLD PRODUCT: In the event of eye contact with cold product, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist. If irritation persists, get medical attention.</p>
Skin contact	<p>HOT PRODUCT: In the event of accidental skin contact with hot product, the injured part should be immediately plunged under cold running water for at least 10 minutes. Body hypothermia must be avoided. No attempt must be made to remove the bitumen adherent to the skin at the worksite. In the case of a circumferential burn with adhesion of the bitumen, the adhering material should be split to prevent a tourniquet effect as it cools. Do not put ice on the burn. Remove non-sticking garments carefully. DO NOT attempt to remove portions of clothing glued to burnt skin but cut round them. Seek medical attention in all cases of serious burns. Never use gasoline, kerosene or other solvents for washing of contaminated skin.</p> <p>COLD PRODUCT: Wash contaminated skin with soap and water.</p>
Inhalation	<p>In case of symptoms arising from inhalation of bitumen fumes, mists or vapour: remove casualty to a quiet and well ventilated place if safe to do so.</p> <p>Exposure to Hydrogen sulphide ; If there is any suspicion of inhalation of H₂S (hydrogen sulphide); Rescuers must wear breathing apparatus, belt and safety rope, and follow rescue procedures. Remove casualty to fresh air as quickly as possible. Immediately begin artificial respiration if breathing has ceased. Provision of oxygen may help. Obtain medical advice for further treatment.</p>
Ingestion	Do NOT induce vomiting. Get medical advice/attention if you feel unwell.
Protection of first-aiders	<p>No action shall be taken involving any personal risk or without suitable training. Hydrogen sulphide (H₂S) can accumulate in the headspace of product storage tanks and reach potentially hazardous concentrations. If there is any suspicion of inhalation of H₂S (hydrogen sulphide); Rescuers must wear breathing apparatus, belt and safety rope, and follow rescue procedures. Before attempting to rescue casualties, isolate area from all potential sources of ignition including disconnecting electrical supply. Ensure adequate ventilation and check that a safe, breathable atmosphere is present before entry into confined spaces.</p>

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact	<p>COLD PRODUCT: minimal redness and irritation.</p> <p>HOT PRODUCT: Contact with hot/molten product will cause severe burns.</p>
Inhalation	Irritation of the respiratory tract due to excess fume, mists or vapour exposure.
Skin contact	Negligible at ambient temperature. Contact with hot/molten product will cause severe burns.
Ingestion	Few or no symptoms expected. If any, slight nausea might 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 using a slightly warmed medicinal liquid paraffin. Bitumen acts as a sterile layer and should only be removed by specialist medical care.
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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media In case of fire, use water spray (fog), foam, dry chemical or CO₂.

Unsuitable extinguishing media

Do not use direct water jets on the burning product; they could cause splattering and spread the fire. Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

Contact of hot product with water will result in a violent expansion as the water turns to steam. This may cause splashing of hot product, or damage to, or complete loss of the tank roof. Respiratory problems or nausea by excessive exposure to hot product fumes.

Hazardous combustion products

Incomplete combustion is likely to give rise to a complex mixture of airborne solid and liquid particulates, gases, including carbon monoxide, H₂S, SO_x (sulfur oxides) or sulfuric acid and unidentified organic and inorganic compounds.

5.3 Advice for firefighters

Special precautions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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. Stop leak if safe to do so. Avoid direct contact with the product. Stay upwind/keep distance from source.

Eliminate all ignition sources if safe to do so.

When the presence of dangerous amounts of H₂S around the spilled product is suspected or proved, additional or special actions may be warranted, including access restrictions, use of special protection equipment, procedures and personnel training.

Note : Leaks and spillages will consist of molten hot material with risk of severe burns. Stop or contain leak at the source, if safe to do so. If required, notify relevant authorities according to all applicable regulations.

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 face 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

SECTION 6: Accidental release measures

Prevent product from entering sewers, rivers or other bodies of water. If necessary dike the product with dry earth, sand or similar non-combustible materials.

Note : solidified product may clog drains and sewers. In case of spillages in the water, the product will cool down rapidly and become solid. The solid product is denser than water and will slowly sink to the bottom, and usually no intervention will be feasible.

6.3 Methods and materials 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 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

General information

For quality, technical, health, safety and environmental reasons, bitumen should not be over-heated. Bitumen temperature should be kept at least 30°C below flash point and should never exceed the industry recommended maximum temperature of 230°C. Excessive heating above the maximum recommended handling and storage temperature may cause degradation of the substance and evolution of irritant vapours and fumes.

Avoid contact of hot product with water. Risk of splashing of hot material. Do not allow water or any liquid to contact with hot product since this could cause splashing of hot material or boil-over. Do not breathe fumes from hot product.

Concentration of H₂S in tank headspaces may reach hazardous values, especially in case of prolonged storage. This situation is especially relevant for those operations which involve direct exposure to the vapours in the tank.

A specific assessment of inhalation risks from the presence of H₂S in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases must be made to help determine controls appropriate to local circumstances.

7.1 Precautions for safe handling**Protective measures**

Do not ingest. Avoid contact with skin. Avoid breathing fume/mist. Use personal protective equipment as required.

Prevent the risk of slipping. Take precautionary measures against static discharge. Avoid splash filling of bulk volumes when handling hot liquid product. Ground/bond container and receiving equipment.

Note: see section 8 for personal protective equipment and section 13 for waste disposal.

Advice on general occupational hygiene

Ensure that proper housekeeping measures are in place. Contaminated materials should not be allowed to accumulate in the workplaces and should never be kept inside the pockets. Wash hands thoroughly after handling. Change contaminated clothes at the end of working shift. Do not eat, drink or smoke when using this product. Do not use solvents or other products with a defatting effect on the skin.

SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

Storage area layout, tank design, equipment and operating procedures must comply with the relevant European, national or local legislation. Storage installations should be designed with adequate bunds in case of leaks or spills. Cleaning, inspection and maintenance of internal structure of storage tanks must be done only by properly equipped and qualified personnel as defined by national, local or company regulations.

Before entering storage tanks and commencing any operation in a confined area, check the atmosphere for oxygen content, hydrogen sulphide (H₂S) and flammability.

Store separately from oxidising agents.

Recommended materials for containers, or container linings use mild steel, stainless steel. Not suitable : Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Compatibility should be checked with the manufacturer.

Use adequate personal protective equipment as needed. Self-heating leading to auto ignition at the surfaces of porous or fibrous materials impregnated with oils or bitumen, can occur at temperatures as low as 100°C. Oil and bitumen contamination of thermal insulation materials and the accumulation of oily rags or similar material near hot surfaces, should therefore be avoided, and lagging should be replaced where necessary by a non-absorbent type of insulation. Deposits (carbonaceous materials and iron sulphides) can develop on the internal walls and roofs of tanks in case of long term storage. These deposits may be pyrophoric and self-ignite in contact with the air.

Where the product is being pumped from a storage tank or road tank care should be taken to avoid the risk of fire or explosion as a result of exposing hot heater tubes. Product tanks may be heated by hot oil, electricity or flame tubes. Under circumstances where bitumen is being pumped from a tank containing heater tubes precautions should be taken to prevent the level dropping 150 mm above the tubes unless the heat has been switched off for a period of sufficient cooling.

7.3 Specific end use(s)

Recommendations Not applicable

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Bitumen fumes	Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 2011). STEL: 10 mg/m ³ 15 minute(s). TWA: 5 mg/m ³ 8 hour(s).
Hydrogen sulfide; hydrosulphuric acid; sulphuretted hydrogen; Hydrogen sulfide (H ₂ S)	Työterveyslaitos, Sosiaali- ja terveysministeriö (Finland, 2011). STEL: 14 mg/m ³ 15 minute(s). STEL: 10 ppm 15 minute(s). TWA: 7 mg/m ³ 8 hour(s). TWA: 5 ppm 8 hour(s).

Recommended monitoring procedures See : Eurobitume Monitoring Method; www.eurobitume.eu - Assessment of Personal Inhalation Exposure to Bitumen Fume. Guidance for an Inhalation Exposure Metric and a Monitoring Strategy

Derived effect levels

Katepal BIP oxidised bitumen

SECTION 14: Transport information

14.6 Special precautions for user	Emptied uncleaned tankers are classified as follows: emptied container Class 9 ADR Latest cargo UN 3257, Elevated temperature liquid, n.o.s.	Not available.	Not available.	Not available.
Additional information	<p><u>Hazard identification number</u> 99</p> <p><u>Special provisions</u> 274; 580; 643</p> <p><u>Tunnel code</u> D</p>	<p><u>Remarks</u> Special provisions</p> <p>274 580 643</p>	<p><u>Emergency schedules (EmS)</u> F-A;S-P</p>	<p><u>Passenger and Cargo Aircraft</u> Quantity limitation: Forbidden</p> <p><u>Cargo Aircraft Only</u> Quantity limitation: Forbidden</p> <p><u>Limited Quantities - Passenger Aircraft</u> Quantity limitation: Forbidden</p>

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable.

Other regulations

Europe inventory Listed in EINECS

United States inventory (TSCA 8b) Not determined.

Australia inventory (AICS) This material is listed or exempted.

Canada inventory Not determined.

Japan inventory This material is listed or exempted.

Korea inventory This material is listed or exempted.

New Zealand Inventory of Chemicals (NZIoC) Not determined.

Philippines inventory (PICCS) This material is listed or exempted.

15.2 Chemical Safety Assessment

Not available.

SECTION 16: Other information

Exposure Scenario information Not applicable

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Not classified.	

Full text of abbreviated H statements : Not applicable.

Full text of classifications [CLP/GHS] : Not applicable.

Full text of abbreviated R phrases : Not applicable.

Full text of classifications [DSD/DPD] : Not applicable.

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.