

Safety Data Sheet

Penetration grade bitumen (50/70)

Version 1.00

Revision Date 22.07.2013

1. Identification of the substance/mixture and of the company/undertaking

Trade name	Penetration grade bitumen (50/70)
Synonyms	Penetration grade bitumen (70/100), Penetration grade bitumen, Asphalt, Petroleum residue, Road binder
Use	Research and development, raw material for adhesives and binders, raw material for stabilizers, surface-active substance, emulsifying agent
Company	Sasol Oil P.O Box 4211 Randburg, 2125 Republic of South Africa
Information (Product safety)	Telephone: +27 11 889 7600/ 0860 72765 Fax: +27 11 889 7979 E-mail address msds.info@sasol.com
Emergency telephone number	Europe, Israel, Africa, Americas +44 (0)1235 239 670 Middle East, Arabic African countries +44 (0)1235 239 671 Asia Pacific +65 3158 1074 China +86 10 5100 3039 South Africa +27 (0)17 610 4444 Australia +61 2 9032 0460

2. Hazards identification

The product does not need to be labelled in accordance with EC directives or respective national laws.

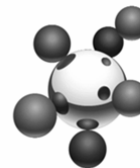
3. Composition/information on ingredients

Asphalt

Contents: 100.00 %W/W

CAS-No. 8052-42-4

EC-No. 232-490-9



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4. First aid measures

Inhalation	Move to fresh air in case of accidental inhalation of vapours.
Skin contact	Hot product can cause thermal burns. Immediately rinse with plenty of cold running water and cover with sterile dressing, seek medical advice if necessary. Thermal burns may result from contact with hot bitumen. Do not remove solidified Bitumen from skin. If product comes in contact with the eyes and / or when ingested or if hot product comes into contact with skin, get immediate medical attention. Bitumen may be removed from the skin by swabbing with medicinally approved vegetable oil or liberal amounts of warm medicinal paraffin under Physicians or medical care.
Eye contact	If hot product is splashed into eyes flush with water and get immediate attention.
Ingestion	Not expected to be a problem. However, if discomfort occurs seek medical attention.

5. Firefighting measures

Suitable extinguishing media	Foam, Carbon dioxide (CO ₂), Dry chemical
Extinguishing media which shall not be used for safety reasons	Water
Specific hazards during firefighting	Burning produces irritant fumes.
Special protective equipment for firefighters	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
Further information	May be combustible at high temperatures. Apply cold water in order to cool containers exposed to danger.

6. Accidental release measures

Environmental precautions	Prevent product from entering drains.
Methods for cleaning up	Sweep up and shovel. Shovel into suitable container for disposal. Bitumens are immiscible with water but may be absorbed in the sediment. Surface material may be skimmed off



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Additional advice *for later disposal.*
Never return spills in original containers for re-use.

7. Handling and storage

Handling

Safe handling advice *Bitumen is commonly handled as a liquid at temperatures above 100°C Wear personal protective equipment. Avoid exposure of heated material atmosphere or oxygen*

Advice on protection against fire and explosion *Keep away from heat and sources of ignition.*

Storage

Requirements for storage areas and containers *Avoid local overheating when raising to pumping temperature. Where hot bitumen is handled in confined spaces, half-face respirators and effective local artificial ventilation should be provided if possible.*

Further information *Stored at elevated temperatures : 150°C - 170°C in bulk tanks*

8. Exposure controls/personal protection

Components with workplace control parameters

NATIONAL OCCUPATIONAL EXPOSURE LIMITS

EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

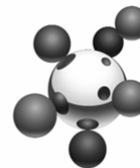
Personal protective equipment

Respiratory protection *In case of insufficient ventilation, wear suitable respiratory equipment.*

Hand protection *Gloves suitable for permanent contact:
Material: butyl-rubber
Break through time: 4 h
Material thickness: 0.5 mm*

Eye protection *Safety glasses*

Hygiene measures *Wash hands before work breaks and immediately after handling*



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Protective measures the product.
General industrial hygiene practice.

9. Physical and chemical properties

State of matter	Solid; at 20 °C; 1,013 hPa
Colour	Dark brown to black
Odour	characteristic
Softening point/range	46 - 56 °C
Flash point	> 230 °C
Density	1.0288 g/cm ³ ; 25 °C
Water solubility	Immiscible, Insoluble
Viscosity, dynamic	25,000 - 400,000 mPa.s

10. Stability and reactivity

Materials to avoid	Oxidizing agents, Strong acids, Alkali metals, Halogens.
Hazardous decomposition products	Carbon oxides
Thermal decomposition	Stable under recommended storage conditions.

11. Toxicological information

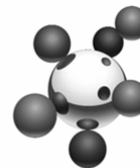
Further information	No toxicology information is available.
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12. Ecological information

Ecotoxicity effects	
Further information	No information on ecology is available.

13. Disposal considerations

Product	Can be landfilled or incinerated, when in compliance with local regulations.
Contaminated packaging	Store containers and offer for recycling of material when in accordance with the local regulations. Empty containers can be landfilled, when in accordance with the local regulations. Empty containers can be landfilled after cleaning, when in compliance



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with local regulations.

14. Transport information

IMDG UN number: 3257; Class: 9; EmS: F-A, S-P; Packaging group: III;
Description of the goods: ELEVATED TEMPERATURE LIQUID,
N.O.S.

ICAO/IATA UN number : 3257; Class: 9; Description of the goods: Elevated
temperature liquid, N.O.S.

Further information IATA - Forbidden for transport on passenger and cargo aircraft in
molten state.
Not dangerous for conveyance under UN, IMO, ADR/RID, IATA
codes if transported at ambient temperature.

MARPOL Annex 1 rules apply for bulk shipments by sea.

15. Regulatory information

Labelling

Regulatory base 1999/45/EC

Additional advice The product does not need to be labelled in accordance with EC
directives or respective national laws.

16. Other information

All reasonable efforts were exercised to compile this SDS in accordance with ISO 11014 and ANSI Z400.1.1993. The SDS provides information regarding the health, safety and environmental hazards, at the date of issue, to facilitate the safe receipt, use and handling of the product in the workplace. Since Sasol and its subsidiaries cannot anticipate or control all conditions under which the product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this SDS in the context within which the product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place as regards health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of the product.

Although all reasonable efforts were exercised in the compilation of this SDS, Sasol does not expressly warrant the accuracy or assume any liability for the incompleteness of the information contained herein or any advice given. The product is sold and risk passes in accordance with the specific terms and conditions of sale.

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