MSDS Viscous petroleum road bitumen grade BND 50/70

SAFETY DATA SHEET

version 1
08.06.2021

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING	
Identification of the substance	Viscous petroleum road bitumen grade BND 50/70
Article number	
Registration number (REACH)	**This information is not available**
EC number	missing
CAS number	missing
Relevant identified uses of the substance or mixture and uses advised against	
Installed applications:	Used as a binder in the construction and repair of road and airfield pavements
Details of the supplier of the safety data sheet	
Limited Liability Company "Bitech" Mailing Address: Russia, 115533, Moskva, Nagatinskaya street, house 5, floor 5, room 503 Legal address: Russia, 115533, Moskva, Nagatinskaya street, house 5, floor 5, room 503	
Phone:	8(495)- 215-25-21
Fax:	8(495)- 215-25-21
Email:	info@bitekh.ru
Web site:	https://bitekh.ru/
Emergency numbers	8 (48142) 5-17-41
Emergency Information Service	8 (48142) 5-17-41

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) № 1272/2008 (CLP)

Classification acc. GHS			
Section	Hazard Class	Class and hazard category	Hazard
2.7	Flammable solids	Flam. sol.2	H228

Remarks

Full text of Hazard - Hazard and EU statements: see section 16.

2.2 Label elements

Labeling in accordance with Regulation (EC) № 1272/2008 (CLP)

Signal word Caution

Pictograms

Hazard

H228	Flammable solid

Precautionary measures

Precautions - prevention

P210	Keep away from sources of ignition / heat / sparks / open flame. Do not smoke
P240	Ground the metal parts of electrical installations and electrical equipment
P241	Use explosion-proof equipment and lighting
P280	Use gloves / protective clothing / eye / face protection (type indicates manufacturer / supplier)

Precautionary measures - reaction

P370+P378	In the event of a fire, extinguish ... (extinguishing media indicates manufacturer / supplier)

Packet marking where the content is not more than 125 ml

Signal word: **Caution**

Symbol(s)

P370+P378	In the event of a fire, extinguish ... (extinguishing media indicates manufacturer / supplier)

2.3 Other hazards

No further information

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Asphalt (bitumen)	**100 %**
EC number	265-196-4
CAS number	64742-93-4

4. MEASURES FOR FIRST AID

4.1 Description of first aid measures

General remarks

Remove contaminated clothing.

Inhalation

Provide fresh air. In all doubtful cases, if the symptoms persist, consult a doctor.

Contact with skin

If molten bitumen enters the skin, immediately cool the skin with water. With an extensive burn, cover the affected area with a sterile bandage and send to a doctor. If solid bitumen of normal temperature gets in, wash it off with soap and water.

Eye contact

In case of contact with hot bitumen, do not remove it from the eye, urgent consultation with an oculist. If bitumen is exposed to normal temperature, rinse eyes with running water.

If swallowed

Rinse the mouth with water, drink water.

4.2 Most important symptoms and effects, both acute and delayed

Headache, dizziness, nausea, sore throat, cough, lacrimation

4.3 Indication of immediate medical attention and special treatment

Missing

5. MEASURES AND FIRE-FIGHTING

5.1 Extinguishing Media

Suitable extinguishing media

The quenching of small foci of burning bitumen must be carried out with bulk materials (sand, talc, etc.).

A means of extinguishing burning bitumen on a large surface is foam extinguishing.

To extinguish burning molten bitumen in confined spaces (in small enclosed areas and in apparatus) it is necessary to use water vapor.

Unsuitable Extinguishing Media

There are no fire extinguishing restrictions for this substance / mixture.

5.2 Special hazards arising from the substance or mixture

Products are flammable.

Danger of suffocation due to prolonged exposure to small concentrations (up to 1%); pulmonary edema during short-term exposure to large concentrations (from 15%).

Hazardous combustion products

In case of fire may form: carbon monoxide (II), carbon monoxide (IV), nitrogen oxide (II), nitrogen oxide (IV)

5.3 Advice for firefighters

Extinguish the fire from a sufficient distance, observing the usual precautions. Wear self-contained breathing apparatus.

6. MEASURES FOR THE PREVENTION AND ELIMINATION OF ACCIDENTAL AND THEIR CONSEQUENCES

6.1 Personal precautions, protective equipment and emergency measures

For non-emergency personnel

Do not breathe vapor / spray. Avoid contact with skin and eyes. Provide good ventilation.

6.2 Environmental precautions

Stay away from sewage, surface and groundwater.

6.3 Methods and materials for localization and purification

Advice on how to prevent leakage

Sewerage

Tips on how to clear a leak

To collect moisture absorbing materials (sand, universal binding material).

Other information regarding spills and emissions

Place in appropriate containers for disposal.

Link to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8.

Incompatible materials: see section 10. Disposal recommendations: see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Provide good ventilation. If not in use, keep containers tightly closed.

Advice on industrial hygiene

Wash hands before breaks and after work. Keep away from food, drinks and animal feed.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed containers.

Incompatible substances or mixtures

Follow directions for combined storage.

Consideration of other tips

Ventilation requirements

Use local and general ventilation.

7.3 Specific End Use (s)

No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

National limits

Restrictions for occupational exposure (Occupational Exposure Limits)

no data

8.2 Means of exposure control

PPE (personal protective equipment)

Eye / face protection

Use safety glasses with side shields.

skin protection

- **hand protection**

Suitable protective gloves. Suitable chemical protective gloves, which are tested in accordance with EN 374. advisable to check the chemical resistance of the gloves for specific applications, as well as a supplier of the gloves.

- **material type**

NBR (Nitrile rubber)

- **material thickness**

> 0,11 mm.

• Breakthrough time of glove material

> 480 minutes (permeability: Level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

Respiratory protection

The apparatus of respiratory protection is necessary for: the formation of an aerosol or mist. Type: A (for organic gases and vapors with a boiling point of> 65 ° C, color code: brown).

Environmental exposure controls

Keep away from sewage, surface and groundwater.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

State of aggregation	black viscous liquid - at high temperatures, solid - at ambient temperature
Smell	odorless at room temperature
Odor threshold	no data available

Other physical and chemical parameters

pH (value)	no data available
Density at 20 ° C	no data available
Melting point / freezing	≥ 51°C /-
Initial boiling point and boiling range	> 450°C
Flash point	> 230°C
evaporation rate	no data available
Flammability (solid gas)	combustible substance
Explosive limits	
• lower explosion limit (LEL)	This information is not available
• upper explosion limit (UEL)	This information is not available
Explosive limits of dust clouds	This information is not available
Gas pressure	<0.75 mm Hg

Density	This information is not available
Vapor density	This information is not available
Bulk density	This information is not available
Relative density	0.98 - 1.06 g/cm^3
Solubility (u)	
Solubility in water	slightly soluble in water, solubility in toluene - 99.0%
distribution factor	
n-octanol / water (log KOW)	This information is not available
ignition point	This information is not available
Autoignition Temperature.	≥ 368°C
decomposition temperature	This information is not available
Viscosity	at 135 ° C - 220 - 420 cSt.
Risk of explosion	This information is not available
Oxidising properties	oxidizes at temperatures above 160 ° C with atmospheric oxygen, boiling when water gets into hot bitumen

9.2 Other information

No further information

10. STABILITY AND REACTIVITY

10.1 Reactivity

Exposure to extreme heat may cause thermal decomposition.

10.2 Chemical stability

The material is stable in normal environmental conditions and in the expected storage and handling conditions for temperature and pressure.

10.3 Possibility of hazardous reactions

No hazardous reactions are known with proper storage, storage and use.

10.4 Situations to Avoid

Conditions to avoid: sources of ignition, excess heat

10.5 Incompatible materials

No additional information.

10.6 Hazardous decomposition

Hazardous combustion products: see section 5.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Exposure route	Endpoint	Value	Species
oral	LD50	> 5 000 mg/kg	rat
inhalation	LC50	> 94,4 mg/m^3	rat
dermal	LD50	> 2 000 mg/kg	rabbit

Skin Corrosive / Irritation

Causes skin irritation.

Serious eye damage / eye irritation

Irritating to eyes.

Respiratory or skin sensitization

Not classified as a respiratory irritant or skin allergen.

Summary of CMR Property Evaluation

Not classified as a germ cell mutagen, carcinogen or toxin for reproduction.

• Specific selective toxicity affecting individual target organs with a single exposure

Not classified as a specific target organ toxicant (single exposure).

Aspiration Risk

Not classified as harmful by inhalation.

Symptoms related to physical, chemical and toxicological characteristics

• if swallowed.

Nausea, vomiting, abdominal pain

• Eye contact.

Cut, tearing, redness

• Inhalation

When inhaling heated bitumen - headache, dizziness, nausea, sore throat, cough, lacrimation

• Contact with skin

In contact with hot bitumen - burns of the skin, eyes

Other information

Other side effects: lethargy, decreased motor activity and reactions to external stimuli.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

acc. with 1272/2008 / EC: Not classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

Endpoint	Value	Species	Source	Exposure time
LL50	> 1 000 mg/l	Fish	ECHA	96 h
LL50	> 1 000 mg/l	Daphnia magna	ECHA	48 h
EL50	> 1 000 mg/l	Pseudokirchneriella subcapitata	ECHA	72 h

12.2 The decomposition process

No data.

12.3 Bioaccumulative potential

No data.

12.4 Mobility in soil

No data.

12.5 Results of PBT and vPvB

No data.

12.6 Other side effects

No data.

13. DISPOSAL CONSIDERATIONS

13.1 Waste Management Methods

The material must be disposed of as hazardous waste. Dispose of contents / container in accordance with local / regional / national / international regulations.

Wastewater disposal - up-to-date information

Do not drain into drains.

13.2 Relevant provisions for waste

Assignment of code numbers / waste labeling in accordance with the Hazardous Materials List Directive in accordance with the industry and process.

13.3 Notes

Waste must be divided into categories that can be treated separately with local or national waste management facilities. Please consider relevant national or regional regulations.

14. TRANSPORT INFORMATION

Transport in accordance with the European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), the Regulations for the International Carriage of Dangerous Goods by Rail (RID), the International Maritime Dangerous Goods Code (IMDG), the rules established by the International Air Transport Association (IATA).

IMDG:	
UN number:	1999
Proper shipping name:	LIQUID OILS, including dissolved road bitumen and bitumen dissolved in petroleum distillate
Class:	3
Additional hazard:	-
Packing group:	III
Special provisions:	-
RID:	
UN number:	1999
Class:	23
Classification code:	F1
Packing instructions:	P001
Special packing provisions:	BB4
Special provisions:	-
IATA:	
UN number:	1999
Packing group:	III
Passenger aircraft:	
EQ	E1
Packing instructions:	P001
Maximum net quantity per package	5 l
Cargo aircraft:	
Packing instructions:	P001
Maximum net quantity per package:	5 l
ERG Code	-

15. REGULATORY INFORMATION

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

The relevant provisions of the European Union (EU)

- **Regulation 649/2012 / EC on the export and import of hazardous chemicals (PIC)**

not listed

- **Regulation 1005/2009 / EC on substances that deplete the ozone layer (ODS)**

not listed

- **Regulation 850/2004 / EC on persistent organic pollutants (POPs)**

not listed

- **Restrictions under REACH, Annex XVII**

not listed

- **List of substances subject to authorization (REACH, Appendix XIV)**

not listed

- **Directive 2011/65 / EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II**

not listed

- **Regulation 166/2006 / EC establishing the European Pollutant Release and Transfer Registers (PRTR)**

not listed

- **Directive 2000/60 / EC establishing a framework for Community action in the field of water policy (WFD)**

not listed

National regulations

The substance is included in the following national regulations:

- EINECS / ELINCS (Europe)

15.2 Chemical Safety Assessment

None of the chemical safety assessment was not carried out for this substance.

16. OTHER INFORMATION

Abbr.	Descriptions of the abbreviations used
CAS	Chemical Abstracts Service (a service that supports the most comprehensive list of chemicals)
CLP	Regulation (EC) № 1272/2008 on the classification, labeling and

	packaging of substances and mixtures
CMR	Carcinogenic, mutagenic or toxic to the reproductive system
DGR	Carriage of Dangerous Goods Regulations (see IATA / DGR)
DMEL	The resulting minimal effect level
DNEL	The resulting minimal effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European Inventory of identified chemicals
IATA	International Air Transport Association
IATA / DGR	Regulations transport of dangerous goods (DGR) for Air Transport (IATA)
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. Of "Marine Pollutant)
NLP	Longer polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Target concentration without affecting
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
vPvB	Very persistent and very bioaccumulative
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ICAO	International civil aviation organization
IMDG	The international code for the transport of dangerous goods by sea
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations of the International Carriage of Dangerous Goods by Rail)
GHS	The Globally Harmonized System of Classification and Labeling of Chemicals "developed by the United Nations

Key literature references and sources of data

- Regulation (EC) № 1907/2006 (REACH), as amended by 453/2010 / EC
- Regulation (EC) № 1272/2008 (CLP, EU GHS)

List of relevant R-phrases (full text of the Code and, as mentioned in chapter 2 and 3)

Code	Text
H228	Flammable solid

Renunciation

The data in this safety data sheet correspond to the level of information, which we had on the date of its printing. Information should serve you a starting point for the safe handling of the product named in this safety data sheet during storage, handling, transportation and disposal. These do not apply to other products. Since the product is processed or blended with other materials, the data from this intolerable MSDS ready for new materials.

General Director

Bitech LLC

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Print place