



ЗАКРЫТОЕ АКЦИОНЕРНОЕ ОБЩЕСТВО

«Многоотраслевая производственная компания «КРЗ»

390017, Россия, г. Рязань, ул. Дружная, 18. Телефоны: (4912) 24-98-37(приемная), факс: (4912) 24-20-33 (общ.)
ОКПО 00287912 ОГРН 1026201099704 ИНН 6230000743 КПП 623050001
www.krz.ru; krz@krz.ru

Safety Data Sheet (SDS)

Prepared in compliance with Regulation (EU)
№ 453/2010, № 1272/2008

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SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product identifier

Trade name: **Bitumen BND 90/130**

Name: Bitumen BND 90/130, GOST 22245-90

Synonyms: Oil bitumen, viscous road bitumen

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

Bitumen BND 90/130 is used as a binder in the construction and repair of road and airfield pavements.

1.3. Details of the supplier of the safety data sheet

Manufacturer: «Diversified Production Company «KRZ», CJSC

Address: 390017, Russia, Ryazan, st. Druzhnaya, h. 18

Tel: +7 (4912) 24-20-33, +7 (4912) 24-20-31

E-mail: krz@krz.ru

1.4. Emergency telephone number:

Emergency Contact Line: 112 (Russia, EU), 911 (USA)

SECTION 2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification	According to Regulation (EC) №1272/2008 (CLP)
Hazards	
for humans:	Not classified
for environment:	Not classified

2.2. Label elements (label according to Regulation (EC) No. 1272/2008 as amended)

Pictogram: None

Signal word: None

Hazard statements: Not classified

Precautionary statements: Not classified

2.3. Other hazards

Physical hazards: Not classified for physical hazards.

Specific hazards: Not available.

Main symptoms: See Sections 11 of the MSDS.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

IUPAC name: none

3.2. Mixtures

Chemical Name	Weight, %	CAS №	EC №	Classification of the substance
Oil bitumen	100	64742-93-4	265-196-4	Not classified

SECTION 4. FIRST-AID MEASURES

4.1. Description of first aid measures

General advice:

Consult a physician. Show this safety data sheet to the doctor in attendance.

Inhalation:

If breathed in, move person into fresh air, provide peace and warmth.

Skin contact:

After contact with the molten product onto the skin - to cool the skin with water immediately. In case of extensive burn, cover the affected skin area with a sterile bandage and refer to a doctor. At hit of a solid product of normal temperature - to wash away with water with soap. Do not use solvents to remove bitumen from the burned body surface.

Eye contact:

Do not remove it from the eye if a hot product gets into the eyes, urgent consultation with an oculist. In case of contact with the product at normal temperature, flush eyes with plenty of running water.

Ingestion:

Unlikely route of exposure. Rinse mouth with water; drink plenty of water, saline laxative. Consult a physician.

4.2. Most important symptoms and effects, both acute and delayed

Fumes of molten bitumen irritate the mucous membranes of the upper respiratory tract. If hot product gets on unprotected skin and eyes, thermal burns are possible.

SECTION 5. FIRE-FIGHTING MEASURES

General fire hazards: Combustible material

5.1. Extinguishing media

Suitable extinguishing media: Gases, powders, gas-aerosol compositions, foam jets.

Unsuitable extinguishing media: It is forbidden to extinguish a liquid product with compact jets of water and sprayed water - a hot product may splash.

5.2. Special hazards arising from the substance or mixture

Combustion products: Carbon monoxide, carbon dioxide.

5.3. Advice for fire fighters

Special precautions for fire fighters: Small fires should be extinguished with sand, a dry powder extinguisher or carbon dioxide extinguisher; large fires should be extinguished with a foam jet from a maximum distance. If possible, remove containers with product from fire area.

Special protective equipment for fire fighters: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

The use of personal protection measures is recommended - see Section 8 of the MSDS.

Contact emergency services where appropriate. Clear area of all unprotected personnel, do not smoke.

Comply with fire safety measures, eliminate fire sources and sparks.

6.2. Environmental precautions

Sealing equipment and packaging. Preventing releasing products. Use the product as recommended by the manufacturer.

6.3. Methods and material for containment and cleaning up

Eliminate leakage with caution, if possible. After cooling, spillage and spillage after cooling, roll up, collect in container, close hermetically and send for disposal. Observe safety precautions in accordance with Sections 5 and 8.

6.4. Reference to other sections

See also Sections 8 and 13 of the MSDS.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

General Precautions:

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas. For precautions see section 2.2, 2.3.

7.2. Conditions for safe storage, including any incompatibilities

Store in heated containers. The temperature of the bitumen during storage should not exceed 160 ° C. In a solid (cold) form, store in a sealed container of the manufacturer, avoiding ingress of moisture and precipitation. Store away from flammable substances.

7.3. Specific end use(s)

None

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Component	MPC of the working area (ACGIH TVL, 1999)
Bitumen	TWA 5 mg/m ³

According to GN 2.2.5.3532-2018 (Russia) MPC w.a. (hydrocarbons) = 300/100 mg/m³.

8.2. Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle with gloves from nitrile rubber with a thickness of at least 0.4 mm. Gloves must be inspected prior to use. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Use protective clothing to protect against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) или EN 166 (EU).

Environmental controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Thermal hazards:

When working with hot material, use suitable thermally protective clothing.

Hygiene measures:

Wash hands after handling. Routinely wash work clothing and protective equipment to remove contaminants. Handle in accordance with good industrial hygiene and safety practices. Follow upon any medical surveillance requirements.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1. Information on basic physical and chemical properties**

Appearance:	Solid matter When heated - viscous fluid
Color:	Black
Odour:	Specific
PH:	Not applicable
Melting point/freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash point:	> 240 °C
Evaporation rate:	Not available
Flammability (solid, gas) :	Not available
Burning time:	Not available
Upper/lower flammability or explosive limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Density:	Not available
Solubility(ies) :	Insoluble in water
Partition coefficient (n-octanol/water) :	Not available
Self-ignition temperature:	368 °C
Decomposition temperature:	Not available
Viscosity:	Not available
Explosive properties:	None
Oxidizing properties	None

SECTION 10. STABILITY AND REACTIVITY**10.1. Reactivity**

May oxidize.

10.2. Chemical stability

The products are stable under normal conditions of transportation and storage.

10.3. Possibility of hazardous reactions

Under normal conditions hazardous reactions will not occur.

10.4. Conditions to avoid

The products are stable.

10.5. Incompatible materials

Avoid overheating, sparks, open flame; strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide, carbon dioxide.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Effect of Acute Exposure

Acute Toxicity

Bitumen:

LD₅₀ > 5000 mg/kg, Oral - Rat

LC₅₀ > 94.4 mg/m³, Inhalation - Rat - 4.5 h

LD₅₀ > 2000 mg/kg, Dermal - Rabbit

Eyes and skin irritation

Hot product fumes irritate the upper respiratory tract. If hot product comes in contact with skin and eyes, thermal burns may occur.

Respiratory or skin sensitization:

Does not have a sensitizing effect.

Specific target organ toxicity - Single exposure:

Does not have a negative impact.

11.2. Effects of chronic exposure

Repeated dose toxicity

Not available.

Specific target organ toxicity - Repeated exposure

Not classified.

Carcinogenicity

Not classified. None of the components of this product in concentrations equal to 0.1% or more is not attributed by IARC to probable, possible or confirmed human carcinogens.

Mutagenicity:

Not classified.

Reproductive toxicity:

Not classified.

Embriotoxicity:

Not classified.

Teratogenicity:

Not classified.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Aquatic Toxicity:

Bitumen:

LL₀ > 1000 mg/l, *Oncorhynchus mykiss*, 96 h

LL₅₀ > 1000 mg/l, *Oncorhynchus mykiss*, 28 d

LL₅₀ > 1000 mg/l, *Daphnia magna*, 48 h

NOEL ≥ 1000 mg/l, *Daphnia magna*, 21 d

12.2. Persistence and degradability

Biotic: No information available.

Abiotic: Hydrolysis as pH function: does not occur

Photolysis / phototransformation: does not occur

12.3. Bioaccumulative potential

Unlikely due to insolubility in water.

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvP assessment

Chemical assessment was not conducted.

12.6. Other adverse effects

No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste disposal

Product

Waste and spilled should be collected in a sealed container and disposed or recycling in accordance with local regulations.

Contaminated packaging

Dispose of in accordance with relevant local legislation.

SECTION 14. TRANSPORT INFORMATION

Special Shipping Information

14.1. UN number

UN 3257

14.2. UN proper shipping name

Bitumen BND 90/130, GOST 22245-90

ADR/RID: ELEVATED TEMPERATURE LIQUID, N.O.S. at or above 100 °C and below its flash point (BITUMEN)

IMDG: ELEVATED TEMPERATURE LIQUID, N.O.S. (BITUMEN)

IATA: ELEVATED TEMPERATURE LIQUID, N.O.S. (BITUMEN)

14.3. Transport hazard class (es)

ADR/RID: 9

IMDG: 9

IATA: 9

Note: Bitumen transported in a solid (cold) state is not classified or marked as dangerous goods.

14.4. Packing group

III

14.5. Label



14.6. Special precautions for user

None

14.7. Others

IMDG transport: F-A, S-P

SECTION 15. REGULATORY INFORMATION

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

Not classified according to EEC Directives 67/548/EEC and 88/379/EEC.

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I: Not listed.

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex II: Not listed.

Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I as amended: Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended: Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended: Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended: Not listed.

Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended: Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry: Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(1) Candidate List as currently published by ECHA: Not listed.

Authorisations

Regulation (EC) No. 143/2011 Annex XIV Substances Subject to Authorisation: Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended: Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work: Not regulated.

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding: Not regulated.

Other EU regulations

Directive 96/82/EC (Seveso II) on the control of major-accident hazards involving dangerous substances: Not regulated.

Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work: Not listed.

Directive 94/33/EC on the protection of young people at work: Not listed.

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended and respective national laws implementing EC directives. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006. National regulations Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

Chemical safety assessment for this substance was not carried out.

SECTION 16. OTHER INFORMATION

Abbreviations and acronyms in the Safety Data Sheet

ACGIH = American Conference of Governmental Industrial Hygienists

CAS = Chemical Abstracts Service

vPvB = very Persistent, very Bioaccumulative (substance)

PBT = Persistent, Bioaccumulative and Toxic (substance)

PNEC = Predicted No Effect Concentration

DN(M)EL = Derived No Effect Level

LD₅₀ = Dose that will kill 50% of test animals

LC₅₀ = Concentration that will kill 50 % of test animals

LL₅₀ = Lethal Loading fifty

EC_x = Concentration at which x% inhibition of growth or growth rate is observed

OECD = Organization for Economic Co-operation and Development

REACH = Registration Evaluation And Authorization Of Chemicals

RID = Regulations concerning International Carriage of Dangerous Goods by Rail

ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG = International Maritime Transport of Dangerous Goods

IATA = International Air Transport Association

IARC = International Agency for Research on Cancer

UVCB = Unknown substances, of Variable Composition, or of Biological origin

ECHA = European Chemicals Agency

EINECS = The European Inventory of Existing Commercial Chemical Substances

References:

Legal provisions quoted in Sections 2 – 15 of the Safety Data Sheet. Substance chemical safety report.

Advice on training for employees:

Unspecified.

The above information is based on our current knowledge and experience. It is not a guarantee of any properties of the product or its quality specifications and it may not provide a basis for any complaint. The product should be transported, stored and used in compliance with applicable laws and regulations, good practices and the rules of occupational hygiene. The information presented is not applicable to mixtures of the product with other substances. The use of the information provided, as well as the use of the product, is not controlled by the manufacturer, and thus it is the User's obligation to create suitable conditions for safe handling of the product.

Users should be aware that we are not responsible for any incorrect use of our product other than as recommended by us.