

Material Safety Data Sheet (MSDS)

Viscosity Grade (VG) Bitumen

Prepared in accordance with ISO 11014-1 and GHS standards

Section 1 – Identification of the Substance and Company

Product Name: Viscosity Grade Bitumen (VG Grades: VG-10, VG-20, VG-30, VG-40)

Chemical Name: Petroleum Asphalt

Chemical Family: Bituminous binder

Intended Use: Road paving, asphalt mixes for various climatic conditions, industrial waterproofing, roofing applications

Grades Available: VG-10, VG-20, VG-30, VG-40

Manufacturer / Supplier:
Basekim Kimyasal Ürünler LTD
Turan Gunes Blv., Ilkbahar Mah., Sinpas Altinoran

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Contact Numbers:

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- Logistics: 88552948
- Emergency (Health & Safety): +90 312 514 7081 (International collect calls accepted)

<u>Section 2 – Composition / Ingredient</u> <u>Information</u>

Component CAS Number Concentration Range

<u>Petroleum Bitumen</u> <u>8052-42-4</u> <u>100%</u>





Section 3 – Hazard Identification

Appearance: Black, semi-solid material with mild petroleum odor

Hazards:

- Contact with hot bitumen can cause severe thermal burns
- Heated vapors may irritate the eyes, skin, and respiratory tract
- <u>Contains trace polycyclic aromatic hydrocarbons (PAHs) possible long-term health hazard from repeated fume inhalation</u>

GHS Classification:

- Not classified as hazardous in solid/cold form
- Skin Burns/Thermal Injury Category 2 (when heated)
- Specific Target Organ Toxicity Repeated Exposure Category 2 (respiratory system, from prolonged inhalation of fumes)

Section 4 - First Aid Measures

Exposure Route Immediate Action

Eye Contact Flush with water for 15 minutes. For burns from hot material, seek immediate medical

care.

Skin Contact Cool affected area with water. Do not attempt to remove solidified bitumen from skin

obtain medical attention.

<u>Inhalation</u> Move to fresh air. If symptoms persist, provide oxygen and get medical help.

Ingestion Rinse mouth, do not induce vomiting. Seek medical advice if discomfort occurs.

Note to Physician: Treat burns as thermal injuries; support respiratory symptoms as necessary.





<u>Section 5 – Firefighting Measures</u>

- Flash Point: > 250°C
- Autoignition Temperature: ~ 450°C
- Suitable Extinguishing Media: Foam, dry chemical, CO2
- Unsuitable Media: Direct water stream on molten bitumen
- Hazardous Decomposition Products: CO, CO₂, SO₃, and incomplete combustion hydrocarbons
- Protective Equipment: Firefighters should use self-contained breathing apparatus and heat-resistant protective clothing

Section 6 - Accidental Release Measures

- Isolate hazard area: allow hot material to cool before handling
- Prevent material from entering drains or watercourses
- Collect cooled solid material mechanically and dispose in accordance with regulations

Section 7 - Handling and Storage

Handling:

- Avoid skin and eye contact with hot material
- Use local ventilation when heating bitumen
- Do not heat above recommended temperature

Storage:

- Store in clean, dry, well-ventilated conditions away from ignition sources
- Keep containers tightly sealed when not in use

Section 8 - Exposure Controls / Personal



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Protection

Occupational Exposure Limit (Bitumen Fume):

• ACGIH TLV: 0.5 mg/m³ (inhalable fraction, benzene-soluble aerosol)

Engineering Controls:

Use local exhaust ventilation when heating

PPE:

- Eyes/Face: Safety glasses or face shield
- Skin: Heat-resistant gloves, protective clothing
- Respiratory: Organic vapor respirator if ventilation is inadequate

Section 9 - Physical & Chemical Properties

Property Value / Range

<u>Appearance</u> <u>Black, semi-solid</u>

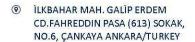
Odor <u>Mild petroleum</u>

Specific Gravity @ 25°C 1.00 - 1.05

Flash Point (°C) > 250

Boiling Range (°C) > 400

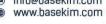
Softening Point (°C) Grade-specific





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Viscosity @ 60°C Grade-specific

Solubility in Water Insoluble

Section 10 - Stability and Reactivity

- Stability: Stable under recommended handling and storage conditions
- Incompatibility: Strong oxidizing agents
- Hazardous Decomposition: Carbon monoxide, carbon dioxide, sulfur oxides, and hydrocarbons

Section 11 - Toxicological Information

- Acute Effects: Fume inhalation may cause mild respiratory irritation
- Chronic Effects: Long-term inhalation of fumes may affect respiratory system; PAHs in fumes are IARC Group 2B (possibly carcinogenic)
- Skin: Prolonged contact with cold bitumen may cause irritation; hot material causes burns

Section 12 - Ecological Information

- Not readily biodegradable
- Floats on water, may cause physical fouling
- Not acutely toxic to aquatic organisms under expected conditions

Section 13 - Disposal Considerations

- Recycle/reuse where possible
- Dispose of in accordance with local/national regulations
- <u>Do not release into the environment</u>





Section 14 – Transport Information

- UN Number: Not regulated in cold/solid form
- Proper Shipping Name: Viscosity Grade Bitumen
- Transport Class: Not classified as dangerous goods (DOT/IMDG/IATA) in solid form

<u>Section 15 - Regulatory Information</u>

- All ingredients are listed on TSCA, EINECS, and other major inventories
- Not classified as hazardous under most regulations in solid state

Section 16 - Other Information

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Disclaimer:

The information in this document is based on current knowledge at the date of publication and is intended to describe product safety requirements, not to guarantee product performance.

