



## TECHNICAL DATA SHEET (TDS) — BITUMEN 90/130

**Manufacturer & Supplier: BASEKIM**

### 1. Product Overview

Bitumen 90/130 is a semi-hard penetration-grade bitumen produced from carefully selected vacuum residue. BASEKIM supplies this grade for asphalt production, road maintenance, waterproofing membranes, and general industrial applications. Because it offers stable penetration, reliable softening point, and clean consistency, it performs well in both mild and warm climates. BASEKIM ensures every batch meets ASTM and international standards for consistent quality.

### 2. Product Applications

Bitumen 90/130 is widely used for:

- Asphalt mix production for light to medium-traffic roads
- Surface dressing, tack coat, and priming
- Waterproofing membranes and bituminous coatings
- Industrial insulation compounds
- Crack sealing and patch mixes
- Manufacturing of bituminous adhesives and mastics

Because of its balanced hardness, it is easy to handle and blends uniformly in hot-mix plants.

### 3. Product Features & Advantages

- **Stable penetration range** for predictable behavior in mixing and paving
- **Good softening point** supporting better thermal resistance
- **Uniform viscosity** that improves coating and mixing quality
- **Excellent adhesion** to aggregates
- **Durable film formation** providing long-term waterproofing
- **Low impurities** due to BASEKIM's controlled production and filtration
- **Consistent performance** in every shipment with verified QC report



## 4. Technical Specifications (Typical Values)

All data below follow ASTM D5, D36, D92, D113, D97, and related standards.

Property	Unit	Test Method	Typical Value
Penetration @ 25°C	0.1 mm	ASTM D5	90 – 130
Softening Point	°C	ASTM D36	40 – 50
Flash Point	°C	ASTM D92	> 230
Ductility @ 25°C	cm	ASTM D113	> 100
Specific Gravity @ 25°C	—	ASTM D70	1.00 – 1.05
Solubility in Trichloroethylene	%	ASTM D2042	≥ 99
Loss on Heating (TFOT)	%	ASTM D6/D1754	≤ 0.8
Penetration After TFOT	% of original	ASTM D5	Retained ≥ 55%
Viscosity @ 135°C	cSt	ASTM D2170	250 – 450
Ash Content	%	ASTM D2415	≤ 0.5

BASEKIM performs batch-wise testing to guarantee compliance with the above values.

## 5. Physical & Chemical Characteristics

- Dark brown to black solid/semi-solid hydrocarbon
- Thermoplastic behavior (softens when heated, hardens when cooled)
- Water-insoluble and highly adhesive
- Compatible with most polymers, fillers, and additives used in asphalt & waterproofing production

## 6. Storage & Handling

- Store in a cool, covered area away from direct sunlight
- Keep containers sealed to prevent oxidation and dust contamination
- Avoid water contact to prevent foaming during heating
- Use proper thermal oil or indirect heating systems
- Recommended storage temperature: **120–140°C**
- Avoid prolonged heating above **160°C** to maintain product stability



## 7. Packaging Options (From BASEKIM)

- New Steel Drums – 180 kg / 150 kg net
- Polybag / Meltable PE Bags – 25 kg
- Jumbo Bags – 500–1000 kg
- Bulk Bitumen – Tanker / Flexi-Tank / Bitutainer

All packaging options include labeling with batch number, net weight, and production date.

## 8. Safety & Transport Information

- Non-flammable in solid form
- Heated bitumen may emit fumes; ensure proper ventilation
- Use PPE: gloves, goggles, face shield, protective clothing
- Do not heat with open flame
- Classified as **Non-Hazardous Cargo** under most transport regulations
- Transport in clean, dry, sealed containers to maintain product quality

## 9. Quality Assurance – BASEKIM

BASEKIM ensures:

- Full QC testing per batch
- Consistent ASTM-compliant production
- Clear documentation and COA provided with every shipment
- Fast loading, safe packaging, and international delivery from Iran, UAE, and Turkey hubs



## 10. Shelf Life

Bitumen 90/130 has a long shelf life of **10+ years** when stored properly in sealed containers and away from moisture.

## 11. Technical Support

BASEKIM provides support for:

- Asphalt mix design
- Waterproofing formulations
- Packaging solutions
- International shipping & documentation