



# TECHNICAL DATA SHEET (TDS)

## Bitumen 60/70

**Manufacturer / Supplier:** ATDM

**Product Type:** Penetration Grade Bitumen

**Standard Reference:** ASTM D946 / EN 12591

## 1. Product Description

Bitumen 60/70 is a penetration grade paving bitumen produced from carefully selected vacuum residue and refined through controlled air-blowing and processing methods. This grade is characterized by medium hardness and balanced viscoelastic properties, making it suitable for road construction and asphalt pavement production in moderate to warm climates.

ATDM supplies Bitumen 60/70 with strict quality control procedures, ensuring stable penetration values, predictable viscosity, and reliable performance in asphalt mixing plants and on-site applications.

## 2. Applications

Bitumen 60/70 is widely used in:

- Asphalt concrete production (Hot Mix Asphalt – HMA)
- Road base and surface course construction
- Highway and urban road paving
- Airport runways
- Industrial yard surfacing
- Asphalt repair and maintenance projects

### 3. Physical & Chemical Properties

Property	Test Method	Unit	Specification
Penetration @ 25°C	ASTM D5	0.1 mm	60 – 70
Softening Point (Ring & Ball)	ASTM D36	°C	49 – 56
Ductility @ 25°C	ASTM D113	cm	≥ 100
Flash Point (Cleveland Open Cup)	ASTM D92	°C	≥ 232
Specific Gravity @ 25°C	ASTM D70	-	1.01 – 1.06
Solubility in Trichloroethylene	ASTM D2042	%	≥ 99
Loss on Heating (163°C, 5h)	ASTM D6	% wt	≤ 0.5
Penetration After Heating	ASTM D5	% of original	≥ 52
Ductility After Heating	ASTM D113	cm	≥ 50
Spot Test	AASHTO T102	-	Negative

### 4. Performance Characteristics

- Excellent adhesion to aggregates
- Stable viscosity during mixing and compaction
- Good resistance to rutting in warm climates
- Balanced flexibility to reduce cracking
- Predictable behavior in asphalt plants
- Compatible with polymer modification systems

Bitumen 60/70 offers a reliable balance between hardness and flexibility, making it one of the most widely used grades in global road construction.

### 5. Production & Quality Control

ATDM ensures:

- Laboratory testing for every production batch
- Full Certificate of Analysis (COA) issued before shipment
- Independent third-party inspection available upon request
- Strict compliance with ASTM and EN standards
- Controlled storage and loading conditions

Each shipment is traceable by batch number and production date.



## 6. Packaging Options

Bitumen 60/70 is available in:

- New steel drums (150–180 kg net weight)
- Jumbo bags (1000 kg)
- Bitubags
- Bulk cargo (heated tanker)
- Flexitank (upon request)

Custom packaging solutions can be arranged depending on destination and client requirements.

## 7. Handling & Storage

- Store in dry, covered areas away from direct sunlight
- Recommended storage temperature: 140–160°C (for bulk storage)
- Avoid overheating above 200°C
- Use proper heating systems with temperature control
- Follow MSDS guidelines for safety procedures

Bitumen must be handled using insulated tanks and appropriate pumping systems.

## 8. Safety Information

- Wear protective gloves and heat-resistant clothing
- Avoid skin contact with hot material
- Use proper ventilation when heating
- Refer to the Material Safety Data Sheet (MSDS) for detailed safety measures

Bitumen 60/70 is non-hazardous at ambient temperature but may cause burns when hot.

## 9. Shelf Life

When stored properly in sealed containers and protected from contamination, Bitumen 60/70 has an indefinite shelf life. However, long-term high-temperature storage should be avoided to prevent oxidation.



## 10. Compliance & Certification

- ASTM D946 compliant
- EN 12591 compliant
- Quality Management System (QMS) controlled production
- COA issued for each batch
- Third-party inspection available (SGS, BV, etc.)

## 11. Technical Support

ATDM provides:

- Technical consultation for grade selection
- Support for asphalt mix design
- Export documentation assistance
- Logistics coordination for bulk and drum shipments

For technical inquiries, laboratory data, or pricing information, contact ATDM sales department.