

TECHNICAL DATA SHEET (TDS)

Product Name: Epoxy Modified Bitumen (Epoxy Asphalt / Epoxy Bitumen)
Brand: ATDM / Petro Gold
Origin: UAE / Turkey / Iran
Product Code: BM-EPX-1515

1. Product Description

Epoxy Bitumen is a two-component thermosetting binder made by blending petroleum bitumen with epoxy resin and curing agent. It combines the adhesive and waterproofing properties of bitumen with the high mechanical strength, chemical resistance, and temperature stability of epoxy resins. It is used for high-performance pavements, bridge decks, waterproof coatings, and anti-corrosive systems.

2. Typical Composition

Component	Percentage by Weight	Description
Bitumen (60/70 or 80/100)	75–85%	Base binder
Epoxy Resin (Bisphenol-A type)	10–20%	Crosslinking resin
Curing Agent (Amine or Polyamide)	5–10%	Hardener for epoxy system
Additives / Fillers	0.5–2%	Anti-stripping, anti-foam, pigment

3. Physical & Chemical Properties

Property	Test Method	Unit	Typical Value
Appearance	Visual	—	Black viscous liquid
Specific Gravity @25°C	ASTM D70	—	1.05–1.10
Penetration @25°C	ASTM D5	0.1 mm	25–45
Softening Point	ASTM D36	°C	85–105
Flash Point	ASTM D92	°C	≥ 250
Viscosity @135°C	ASTM D4402	cP	1000–2500
Adhesion to Concrete	ASTM D4541	MPa	≥ 2.5
Water Absorption (24h)	ASTM D570	%	< 0.3
Curing Time @25°C	—	h	6–8

4. Applications

- Bridge deck waterproofing and bonding layer
- High-performance road pavement binder
- Waterproof coating for concrete and steel
- Chemical-resistant and anti-corrosive lining

5. Storage & Handling

Store in tightly closed containers under shade between 10–40°C. Avoid contact with moisture. Shelf life is typically 6 months. Handle with gloves and safety glasses.

6. Packaging

Available in 200 kg steel drums or 1-ton IBC tanks. Custom packaging on request.

7. Disclaimer

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