



 Technical Data Sheet (TDS) – Polymer Modified Bitumen PMB 120

PetroGold Bitumen Refinery

◆ Product Overview

- **Product Name:** Polymer Modified Bitumen PMB 120
 - **Product Code:** PMB-120
 - **Type:** SBS-Modified Bitumen (Elastomeric Polymer Modified Asphalt)
 - **Manufacturing Method:** Blending penetration-grade bitumen with Styrene-Butadiene-Styrene (SBS) polymers under controlled conditions
 - **HS Code:** 27132000
 - **CAS Number:** 64742-93-4
 - **Country of Origin:** Iran
 - **Manufacturer:** PetroGold Bitumen Refinery
 - **Standards Compliance:** ASTM D5, D36, D6084, D92, D113, D7173, D4402 | EN 13304:2009
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◆ Product Description

PMB 120 is a high-performance polymer modified bitumen engineered for advanced road construction and industrial waterproofing. The addition of SBS polymers significantly improves elasticity, thermal stability, resistance to rutting, and durability under cyclic loads and harsh climates. This grade is designed to perform exceptionally in heavy traffic zones and complex infrastructure projects.

◆ Key Applications

- Heavy-duty highway and expressway surfacing
- Airport runway pavement and aprons
- Bridge decks, flyovers, and expansion joints
- Waterproofing membranes and industrial flooring
- Port and container yard surfacing
- Railway ballast stabilization and joint sealing





◆ **Product Features**

- Excellent elastic recovery and deformation resistance
- Enhanced fatigue and rutting resistance
- Long-term weather and aging durability
- Compatible with conventional paving equipment
- Proven adhesion to aggregates and construction materials

◆ **Technical Specifications**

Property	Test Method	Unit	Typical Value	Specification Range
Penetration @ 25°C	ASTM D5	0.1 mm	45	40 – 50
Softening Point (Ring & Ball)	ASTM D36	°C	60	55 – 65
Elastic Recovery @ 25°C	ASTM D6084	%	80	≥75
Storage Stability (Softening Point Difference)	ASTM D7173	°C	0.3	≤0.5
Flash Point (COC)	ASTM D92	°C	260	≥250
Fraass Breaking Point	EN 12593	°C	-12	-10 to -15
Viscosity @ 135°C	ASTM D4402	cP	4000	3000 – 5000
Cohesion Strength	ASTM D5329	J/cm ²	1.8	≥1.5
Ductility @ 25°C, 5 cm/min	ASTM D113	cm	>100	≥100
Separation Tendency	ASTM D7173	%	0.2	≤0.3

◆ **Packaging & Storage**

- **Packaging:** 200 kg steel drums, bulk tankers, custom containers upon request





- **Storage Temperature:** 150°C – 180°C
- **Shelf Life:** 12 months in sealed condition
- **Precautions:** Store in dry, shaded, and ventilated areas. Avoid direct sunlight and ignition sources. Always wear PPE when handling hot material.

◆ Safety & Handling

- Avoid contact with hot bitumen—serious burns may occur.
- Use proper ventilation during heating.
- Refer to the **Safety Data Sheet (SDS)** for full handling guidelines.

◆ Quality Assurance

Every batch of **PMB 120** from **PetroGold Bitumen Refinery** is thoroughly tested in accordance with ASTM and EN standards. Independent third-party inspections can be arranged to verify quality and compliance. Our PMB products are trusted by major infrastructure developers globally.

