TECHNICAL DATA SHEET

HIGH-PERFORMANCE ASPHALT COATING H-25

The High-Performance Asphalt Coating H-25 is a modified hydrocarbon additive composed of an emulsion of high-molecular-weight thermoplastic derived from asphalt. This product efficiently improves asphalt pavement surfaces, protecting them from environmental factors and moderate traffic. It is formulated with materials free of polycyclic aromatic hydrocarbons (PAHs), which are known to cause serious health issues such as cancer. Its composition includes low-penetration asphalts, polymers, and minerals that provide excellent durability. The product features fast drying and can be applied at night or in shaded areas.

System Benefits

- Does not contain Polycyclic Aromatic Hydrocarbons (PAHs).
- High softening point.
- Improved ductility in cold climates.
- Safe to handle and store.
- Excellent chemical resistance (spill resistance).
- Due to its high molecular weight, it offers excellent cohesion and high abrasion resistance.
- Fast drying and curing time (typically 2 hours).
- High resistance to infrared and UV rays.
- Protects pavements from wear and environmental factors.
- Recommended for low-traffic areas, runway shoulders, and edges.
- Does not reduce friction thanks to its mineral content, maintaining macrotexture.

Transport, Storage, and Handling

- Keep out of reach of children.
- Do not allow the product to freeze before application.
- Do not mix with other products.
- Avoid prolonged contact with skin.
- Keep containers tightly sealed when not in use.
- Store in a dry, cool area, protected from sunlight.
- For prolonged storage (more than 30 days), stir the material every two weeks to reincorporate components. Reseal container tightly afterward.
- In case of accidental ingestion, do not induce vomiting. Seek medical attention immediately.

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BINDER

Emulsion Characteristics	**Value**
Saybolt-Furol Viscosity at 25 °C, s	25–500
Settlement in 5 days; % difference, max	1
Settlement in 3 days; % difference, max	5
Asphalt cement content by mass, %, min	58
Naphtha content, %, max of distillation residue	1
Base Asphalt Characteristics	**Value**
Penetration at 25 °C, 100g, 5s; 0.1 mm	8–20
Softening point, °C, min	70
Dynamic shear rheological modulus at 86 °C (G*/Send); kPa, min	1

H-25 CONCENTRATE

TEST	**SPECIFICATION**	**RESULT**	**ASTM SPECIFICATION**
Stability	Material must be homogeneous and stable without irreversible separation of its components.	PASS	D-140 / D-466
Non-Volatile Content	44–48% min	PASS	D-2939
Non-Volatile Ashes	28–32%	PASS	D-2939
Specific Gravity at 25 °C	1.13 minimum	PASS	D-529 / D-2939
Adhesion and Water Resistance	No loss of adhesion and no water penetration	PASS	D-2939
Heat and Impact Resistance	No abrasion, no chipping, or detachment	PASS	D-2939
Flexibility	No cracking or flaking	PASS	D-2939

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General Application Recommendations

Although the proportions and dosage depend on project conditions, the following can be used as a practical guideline—always conducting and approving test sections beforehand.

Mixture Preparation.

- The recommended volumetric proportions for easy on-site measurement are as follows:
  1,000 L of H-25 + 300 L of water.
- Do not add additional aggregate.
- The amount of water may be slightly adjusted to achieve better consistency and ease of application; however, do not exceed **350 L of water per 1,000 L of H-25**.
- All components must be thoroughly mixed prior to application to ensure uniformity.
- The concentrate contains minerals that help maintain surface friction; these must be fully reincorporated during the mixing process.

Application.

- Perform preliminary repairs (patching, leveling, crack sealing, etc.) in advance, ensuring full curing and drying, with no oil exudation or moisture.
- The surface must be completely dry.
- Conduct fine cleaning to remove any debris that may affect adhesion, such as dust or soil; for oil or fuel spills, use a degreaser.
- Apply the product using spraying equipment.
- For faster drying times, apply in a single pass; if conditions require, two passes may be applied.
- The use of rubber squeegees is **not recommended**.

Dosage.

For areas with **low to medium operational demand**, such as taxiways, service roads, internal roads, apron areas, and runway shoulders, the recommended application rate is **0.8 to 1.0 L/m²**.

For **runway and taxiway edges** or **low-traffic areas**, the dosage may range from **0.6 to 0.8 L/m²**, depending on surface conditions.

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