



Technical Data Sheet (TDS)

Cutback Bitumen SC 3000

Slow Curing Liquid Bitumen for Prime Coating & Base Stabilization

1. Product Description

Cutback Bitumen SC 3000 is a **slow-curing (SC) liquid asphalt** manufactured by blending high-quality penetration grade bitumen with controlled petroleum solvents. It is designed to provide deep penetration into granular base layers and superior bonding between pavement layers.

The product remains fluid at ambient temperatures and gradually cures as solvents evaporate, leaving a durable asphalt film that enhances structural integrity and moisture resistance.

2. Product Identification

- **Product Name:** Cutback Bitumen SC 3000
- **Type:** Slow Curing (SC) Cutback Asphalt
- **Viscosity Grade:** 3000 (Saybolt Furol)
- **Application:** Prime coat, base stabilization, surface dressing

3. Typical Applications

- Prime coating for granular road bases
- Base course stabilization
- Dust control on unpaved roads
- Surface treatment preparation
- Industrial yard and access road preparation

4. Advantages

- Deep penetration into porous base layers
- Strong adhesive bonding properties
- Reduced need for heating compared to penetration bitumen
- Improved pavement durability
- Suitable for hot and dry climates
- Extended curing time for optimal absorption



5. Technical Specifications

Property	Test Method	Typical Value	Specification Range
Kinematic Viscosity @ 60°C	ASTM D2170	3000 sec (SF)	2500 – 6000 sec
Flash Point (Tag Open Cup)	ASTM D3143	> 66°C	Min 66°C
Distillation Test – Total Distillate to 360°C	ASTM D402	—	15 – 40 %
Residue from Distillation	ASTM D402	≥ 60 %	Min 60 %
Penetration of Residue @ 25°C	ASTM D5	40 – 120 dmm	40 – 120 dmm
Ductility of Residue @ 25°C	ASTM D113	> 100 cm	Min 100 cm
Water Content	ASTM D95	< 0.2 %	Max 0.2 %
Solubility in Trichloroethylene	ASTM D2042	99 %	Min 99 %

Note: Values are typical results and may vary slightly depending on production batch.

6. Performance Characteristics

- **Curing Behavior:** Slow evaporation of solvent allows maximum penetration.
- **Adhesion:** Excellent bonding to aggregates and granular materials.
- **Moisture Resistance:** Forms a water-resistant asphalt film after curing.
- **Workability:** Can be applied at ambient temperature or with mild heating.

7. Application Guidelines

Surface Preparation

- Surface must be clean, dry, and free of dust or loose materials.
- Ensure proper grading and compaction before application.

Application Rate

- Typical prime coat application rate:
0.8 – 1.5 liters per square meter, depending on base porosity.



Equipment

- Calibrated bitumen distributor spray truck.
- Manual spraying equipment for small areas.

Weather Conditions

- Do not apply during rain.
- Ambient temperature should generally be above 10°C.
- Avoid high wind conditions during spraying.

8. Handling & Storage

- Store in tightly closed drums or bulk tanks.
- Keep away from open flames and ignition sources.
- Recommended storage temperature: 20°C – 50°C.
- Ensure proper ventilation in storage areas.

9. Health & Safety Information

Cutback Bitumen SC 3000 contains petroleum solvents and is flammable.

Safety Precautions:

- Use protective gloves and safety goggles.
- Avoid inhalation of vapors.
- Provide adequate ventilation.
- Follow local safety regulations.

Refer to the Material Safety Data Sheet (MSDS) for detailed safety guidance.

10. Packaging

- 180 kg new steel drums
- Bulk tanker supply
- ISO tank containers for export

Packaging options may vary depending on customer requirements.

11. Shelf Life

Under proper storage conditions, the product maintains its properties for up to **12 months** from production date.



12. Quality Assurance

Cutback Bitumen SC 3000 is manufactured under strict quality control procedures to ensure compliance with:

- ASTM D2026
- AASHTO Specifications
- International road authority standards

Each shipment is supplied with a Certificate of Analysis (COA) confirming compliance with specification limits.

13. Environmental Considerations

- Contains volatile organic compounds (VOCs).
- Use in accordance with local environmental regulations.
- Avoid over-application to minimize emissions.

14. Disclaimer

The information provided in this Technical Data Sheet is based on laboratory testing and practical experience. It is intended as a guideline for proper application and handling. Users are responsible for verifying suitability for specific project conditions.