



TECHNICAL DATA SHEET (TDS)

Bitumen CB30

Water-Based Bituminous Emulsion – Medium Curing Grade

1. Product Description

Bitumen CB30 is a water-based bituminous emulsion formulated for road construction and maintenance applications. It is designed to provide controlled curing, strong penetration into granular base layers, and reliable adhesion to mineral aggregates.

After application, the water phase evaporates, leaving a uniform and cohesive bitumen film that enhances bonding between layers and improves pavement durability.

This product is suitable for spray application and can be used at ambient or moderately elevated temperatures.

2. Recommended Applications

- Prime coat on granular road base
- Surface dressing
- Patch repair works
- Low-traffic road construction
- Rural and municipal road maintenance
- Preparation layer before asphalt overlay

3. Typical Technical Properties

Property	Test Method	Unit	Typical Value
Appearance	Visual	—	Dark brown liquid
Residue by Evaporation	ASTM D244	% wt	55 – 65
Viscosity @ 25°C	ASTM D244	Saybolt Furol sec	20 – 100
Storage Stability (24 hrs)	ASTM D6930	%	Max 1
Sieve Test (850 µm)	ASTM D6933	%	Max 0.1
Demulsibility	ASTM D6936	%	40 – 80
Penetration of Residue @ 25°C	ASTM D5	dmm	60 – 120
Ductility of Residue @ 25°C	ASTM D113	cm	Min 40
Flash Point (Residue)	ASTM D92	°C	> 230
Solubility in Trichloroethylene	ASTM D2042	%	Min 97

Values are typical production averages and may vary slightly depending on crude source and formulation.

4. Performance Characteristics

- Medium curing rate
- High penetration capability into base materials
- Uniform and stable sprayability
- Strong adhesion to aggregates
- Good workability in moderate climates
- Reduced heating requirement compared to penetration grades



5. Application Guidelines

Surface Preparation

- Surface must be clean and free from dust or loose particles.
- Base layer should be dry or slightly damp (not saturated).

Application Temperature

- Recommended application temperature: 20°C – 60°C
- Avoid application during rain or freezing conditions.

Spray Rate (Typical)

- Prime coat: 0.7 – 1.5 kg/m² (depending on base porosity)
- Surface treatment: Adjust based on aggregate type and traffic load.

Curing Time

- Typically 4–24 hours depending on weather conditions.
- Ensure full breaking and curing before overlay placement.

6. Packaging Options

- 200 kg new steel drums
- Bulk tanker
- IBC tank
- Flexitank for export shipment

Custom packaging available upon request.

7. Storage & Shelf Life

- Store in tightly sealed containers.
- Protect from freezing.
- Avoid prolonged exposure to direct sunlight.
- Recommended storage temperature: 5°C – 40°C.
- Shelf life: Up to 6 months under proper storage conditions.

If separation occurs during storage, mild agitation is recommended before use.

8. Safety & Handling



- Avoid contact with skin and eyes.
- Use protective gloves and safety glasses during handling.
- Do not ingest.
- In case of skin contact, wash with soap and water.
- Refer to MSDS for full safety information.

Bitumen CB30 is water-based and contains significantly lower volatile organic compounds compared to solvent-based cutbacks.

9. Quality Control

Each batch is tested prior to dispatch to ensure compliance with international standards. Certificate of Analysis (COA) is issued for every shipment.

Testing parameters include:

- Residue content
- Viscosity
- Storage stability
- Penetration and ductility of residue

10. Compliance & Standards

Bitumen CB30 is produced in accordance with relevant ASTM specifications for emulsified asphalt and conforms to international road construction requirements.

Custom formulations can be supplied based on project specifications.

11. Export & Logistics

Available for bulk export worldwide.

All shipments can be inspected by third-party international inspection companies upon buyer request.

Full export documentation provided:

- Commercial Invoice
- Packing List
- Bill of Lading
- Certificate of Origin
- COA
- MSDS



Disclaimer

The information provided in this Technical Data Sheet is based on standard laboratory testing and production experience. Actual performance may vary depending on environmental conditions and application methods. Users are advised to conduct field trials before full-scale application.