



## TECHNICAL DATA SHEET (TDS)

### BITUMEN C600

Australian Standard AS 2008 – Viscosity Graded Bitumen

#### PRODUCT DESCRIPTION

Bitumen C600 is a premium viscosity-graded paving bitumen manufactured from carefully selected crude oil refining processes and produced in accordance with Australian Standard AS 2008. This grade is specifically designed for use in heavy-duty asphalt pavements subjected to high traffic loads and elevated service temperatures.

The high viscosity characteristics of C600 provide excellent resistance to rutting, deformation, fatigue cracking, and permanent pavement distress, making it particularly suitable for highways, airports, industrial pavements, container terminals, and other heavily trafficked infrastructure projects.

#### PRODUCT BENEFITS

##### Key Advantages

- ✓ Excellent resistance to rutting and shoving
- ✓ Superior performance under heavy traffic loading
- ✓ Enhanced durability and pavement life
- ✓ Excellent aggregate coating properties
- ✓ High resistance to permanent deformation
- ✓ Suitable for hot climate conditions
- ✓ Consistent manufacturing quality
- ✓ Compatible with conventional asphalt production equipment



## TYPICAL APPLICATIONS

Application	Recommended
Highways & Expressways	✓
Airport Runways	✓
Taxiways & Aprons	✓
Industrial Pavements	✓
Container Terminals	✓
Heavy Traffic Roads	✓
Urban Arterial Roads	✓
Asphalt Concrete Production	✓

## TECHNICAL SPECIFICATIONS

### Australian Standard AS 2008 Requirements

Property	Test Method	Unit	Specification
Viscosity at 60°C	AS 2341.2	Poise	500 – 700
Viscosity at 135°C	AS 2341.2	Pa.s	Report
Penetration at 25°C	AS 2341.12	dmm	Min 20
Flash Point (COC)	AS 2341.14	°C	Min 250
Solubility in TCE	AS 2341.7	%	Min 99.0
Density at 25°C	AS 2341.9	kg/m <sup>3</sup>	Report
Loss on Heating	AS 2341.10	%	Max 0.8
Viscosity Ratio After TFOT	AS 2341.13	Ratio	Max 4.0
Ductility of Residue	AS 2341.11	cm	Report



## TYPICAL PHYSICAL PROPERTIES

Property	Typical Value
Appearance	Black Homogeneous Material
Physical State	Solid/Semi-Solid at Ambient Temperature
Odor	Mild Petroleum Odor
Specific Gravity @ 25°C	1.01 – 1.05
Softening Characteristics	High
Water Solubility	Insoluble
Volatility	Low
Flash Point	>250°C

## PERFORMANCE CHARACTERISTICS

### High Temperature Performance

Bitumen C600 provides superior resistance to:

- Rutting
- Shoving
- Surface deformation
- Heavy wheel loading
- High pavement temperatures

### Structural Durability

The high viscosity nature of C600 contributes to:

- Improved load distribution
- Enhanced fatigue resistance
- Extended pavement service life
- Reduced maintenance requirements

### Workability

Bitumen C600 demonstrates:

- Excellent aggregate adhesion



- Consistent mixing characteristics
- Reliable compaction performance
- Uniform coating properties

## MANUFACTURING AND QUALITY CONTROL

Bitumen C600 is produced under strict quality control procedures to ensure compliance with Australian Standard AS 2008 requirements.

Each production batch is tested for:

Quality Parameter	Verification
Viscosity	100% Batch Tested
Flash Point	Routine Testing
Penetration	Routine Testing
Density	Routine Testing
Heating Stability	Routine Testing
Solubility	Routine Testing

## RECOMMENDED HANDLING TEMPERATURES

Operation	Temperature Range
Storage	130–150°C
Pumping	140–160°C
Mixing	175–185°C
Spraying	170–185°C
Maximum Safe Heating	190°C

**Note:** Prolonged heating above recommended temperatures may adversely affect product properties.



## STORAGE REQUIREMENTS

### Storage Conditions

- Store in insulated bitumen tanks.
- Maintain temperature between 130°C and 150°C where practical.
- Avoid localized overheating.
- Prevent water contamination.
- Use indirect heating systems where possible.

### Shelf Life

When stored under recommended conditions, Bitumen C600 remains stable for extended periods without significant degradation.

## PACKAGING

Bitumen C600 is available in:

Packaging Type	Availability
Bulk Tanker	Standard
Bitutainer	Available
Flexitank	Available
Steel Drum	Available Upon Request
Jumbo Bag (Solidified)	Available Upon Request

## HEALTH AND SAFETY

When heated, bitumen may generate fumes that can cause irritation.

Users should:

- Wear appropriate PPE.
- Use adequate ventilation.
- Avoid skin contact with hot material.
- Refer to the latest Safety Data Sheet (SDS) before use.



## ENVIRONMENTAL INFORMATION

- Insoluble in water.
- Avoid release into drainage systems.
- Dispose of waste material according to local regulations.
- Product is recyclable in reclaimed asphalt pavement (RAP) applications.

## COMPLIANCE

Bitumen C600 complies with the requirements of:

Australian Standard AS 2008

### Residual Bitumen for Pavements

The product is manufactured under established quality management systems and subjected to routine quality verification testing.

## TYPICAL USES IN INFRASTRUCTURE PROJECTS

Sector	Typical Application
Roads	Highways and major roads
Aviation	Runways and taxiways
Ports	Container terminals
Mining	Heavy haul roads
Industrial	Distribution centers
Municipal	Urban road networks



## DISCLAIMER

The information contained herein is based on current knowledge and experience and is intended to provide guidance regarding the handling and application of Bitumen C600. Actual performance may vary depending on project design, climatic conditions, aggregate characteristics, and construction practices. Users should conduct their own evaluation to determine suitability for specific applications.