



# CSS 60

## Cationic Stablemix Bitumen Emulsion

Product Data Sheet 2014/04

### DESCRIPTION

**CSS 60** is a low viscosity cationic slow-set bitumen emulsion.

### USES

**CSS 60** is used mainly as a cold applied binder for the manufacture of slow-set slurry mixtures which can be batch mixed, and applied by hand or with a continuous mix and lay machine.

**CSS 60** can also be used for mixing with natural gravels or crushed aggregates for stabilisation of bases.

**CSS 60** can also be diluted with water and applied onto aged seals as an enrichment spray or as a tack coat for an asphalt overlay.

### PROPERTIES

The slow setting nature of **CSS 60** makes it ideal for mixing and applying slurries by hand. Slurry mixtures prepared by batch mixing can be kept workable in transit mixes for 1 hour before setting. The positive electrical charges of the emulsifier on the bitumen droplets are attracted to the free negative ions of the aggregates resulting in a chemical break, thus improving the binder adhesion to the stone, which makes this emulsion more suitable for use with acidic aggregates.

### SPECIFICATIONS

**CSS 60** conforms to SANS 4001-BT4 specification for cationic bitumen road emulsions.

EMULSION PROPERTIES	REQUIREMENT		TEST METHOD
	Min	Max	
Binder content, % m/m	60	63	ASTM D244
Viscosity @ 50°C, SFs	-	50	ASTM D244
Residue on sieving, g/100 ml	-	0.25	SANS 4001-BT4
Sedimentation after 60 rotations	Nil		SANS 4001-BT4
Particle charge	Positive		SANS 4001-BT4
Fluxing agent content, % m/m of binder	Nil		ASTM D244
Coagulation value when mixed with silica flour, % m/m	-	2	SANS 4001-BT4

### DIRECTIONS FOR USE

1. **CSS 60** can be stored and mixed with aggregates at ambient temperature.
2. Can be stored for up to three months at ambient temperature without risk of settlement.
3. The binder should be heated to 60°C for spray application.
4. If diluting with water, check the compatibility with the water before adding to the emulsion.

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