



COLRUT™

Elastomer Modified Microsurfacing Emulsion

Product Data Sheet 2019/01

DESCRIPTION

COLRUT™ is a specially formulated quick set cationic microsurfacing bitumen emulsion modified with SBR latex for mixing with selected coarse graded crushed aggregate, cement and water. These raw materials are mixed and applied with a purpose designed machine and augured rut filling box.

USES

Rut filling is a cost effective remedial treatment for improving the road profile by filling wheel ruts > 12 mm < 20 mm, thus helping to reduce water spray and aquaplaning in wet weather conditions. Filled wheel ruts can be overlaid with microsurfacing, prepared with **COLPAVE™** or **COLMAT L™** microsurfacing bitumen emulsion, to provide a uniform appearance.

PROPERTIES

Due to its fluid nature, the microsurfacing has the ability to fill surface irregularities, such as wheel ruts, to restore the road profile and improve the skid resistance of an existing surface. The specially designed augured rut filling box ensures that the coarser aggregate is concentrated in the centre of the rut, whilst the finer fractions are moved towards the edge of the box, ensuring a thin feathered edge.

The SBR latex in the **COLRUT™** bitumen emulsion, improves the temperature susceptibility of the binder and the adhesion of the aggregate, which reduces risk of aggregate loss especially in the early life of the seal.

SPECIFICATIONS

COLRUT™ bitumen emulsion is manufactured from 50/70 penetration grade bitumen and conforms to the AC-E2 specification for Polymer Modified Emulsions:

EMULSION PROPERTIES		REQUIREMENT		TEST METHOD
		Min	Max	
Binder content, % m/m		62	65	MB-22
Residue on sieving, g/100 ml	710 µm	-	0,1	MB-23
	150 µm	-	0,5	
Particle charge		Positive		MB-24
Sedimentation after 60 complete rotations		Nil		SANS 4001 – BT3
RECOVERED BINDER PROPERTIES				
Softening point, °C		≥ 55	-	MB-17
Elastic recovery @ 15°C		≥ 55	-	MB-4

DIRECTIONS FOR USE

1. Localised cracks must be sealed and fatigue cracks repaired prior to placing of microsurfacing prepared with **COLRUT™**.
2. Microsurfacing will not prevent cracks from reappearing and neither does it add structural strength to the pavement.
3. No tack coat is needed and neither is pneumatic rolling required.
4. The typical emulsion content is 170 litres of **COLRUT™** per m³ of aggregate for crusher dust that conforms to the requirements of the Colto (Fine slurry) Coarse grading specification.
5. The rut filling box width can be varied between 1.5 - 1.8 metres.
6. Microsurfacing prepared with **COLRUT™** is designed to be opened to traffic within 5 hours of placing during normal weather and ambient temperatures not exceeding 35°C, provided that the reactivity of the aggregate is favourable.
7. If the rut depths are between 20 and 50 mm, two separate applications will be required, allowing at least 48 hours before the second application.
8. Suitability of the crusher dust must be determined by a Colas laboratory.

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