

DESCRIPTION

COLRUB™ is a non-homogenous binder manufactured from penetration grade bitumen modified with a relatively high percentage of rubber crumbs and a small amount of aromatic extender oil. Used vehicle tyres are processed to obtain the rubber crumbs which have to meet specific grading as well as natural rubber content requirements.

USES

COLRUB™ is used mainly for resealing roads with active surface cracks > 5 mm. Also suitable for use in stress absorbing membrane Interlayers (SAMI) to help reduce reflective cracking, as the binder can be applied at higher application rates than conventional penetration grade bitumen and homogenous polymer modified binders without risk of bleeding.

PROPERTIES

COLRUB™ has improved rheological binder properties versus conventional hot binders across the in-service temperature range. Increased binder durability due to the presence of carbon black in the rubber crumbs.

SPECIFICATIONS

COLRUB S™ conforms to the S-R1 and A-R1 specification for Bitumen Rubber for hot sealing applications.

BINDER PROPERTIES	REQUIREMENT		TEST METHOD
	COLRUB (S-R1)	COLRUB (A-R1)	
Softening point, °C	55 - 65	65 - 80	ASTM D36
Dynamic viscosity @ 190°C, dPa·s	20 - 40	20 - 50	MB-13
Compression recovery: 5 minutes, %	>70	>80	MB-11
Compression recovery: 1 hour, %	>70	>70	MB-11
Compression recovery: 4 days, %	>40	N/A	MB-11
Resilience, %	13 - 35	13 - 10	MB-10
Flow, mm	15 - 70	10 - 50	MB-12

DIRECTIONS FOR USE

1. Precoating of stone necessary. Chip spreader to follow closely behind sprayer.
2. Apply with a special binder distributor fitted with augers at a minimum road surface temperature of 25°C and rising.
3. Minimum temperatures for asphalt manufacturing are viscosity dependent.
4. The seal can be opened to traffic immediately after rolling and sweeping without risk of chip loss.
5. Recommended storage and handling criteria for **COLRUB™** are as follows:

Short term handling		Storage		Spraying/Asphalt Application	
Max. Temp	Max. holding time	Max. Temp	Max. holding Time	Temperature	Max. Holding time
*170 °C	5 Hours	*150 °C	5 Hours	190 - 210 °C	5 Hours

* Product must be applied within 4 hours of reaction time to avoid degradation of the binder properties.

** It is important to circulate the binder during heating as prolonged intense heating will cause localised overheating that may result in carbonisation of the binder on the flues which may lead to blocked nozzles and/or a reduction in the binder's shelf life.

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