

EMULSION - COLD MIX

DURAPAVE Emulsis CM & CM SS2

APPLICATIONS:

Cold Mix technology is a highly engineered but simple & effective solution. It is used for paving rural roads, farm link roads, and low volume roads.

PRODUCT CERTIFICATIONS:

Bureau of Indian Standards (BIS): CM/L- No-3015129

AVAILABLE GRADES:

- 1.DURAPAVE EMULSIS CM
- 2.DURAPAVE EMULSIS CM-SS2

SPECIFICATIONS:

DURAPAVE EMULSIS CM, CM-SS2 meets the specifications as per IRC: SP: 100-2014

BENEFITS:

- Energy efficient and environment friendly and low temperature curing.
- Highly adhesive properties and water resistant and enhances easy drainage of water.
- Enhances structural strength of layers.
- Emissions from manufacturing and laying of hot bituminous mixes are eliminated.
- Continuous construction in rainy season and extends construction period in a year.
- Inbuilt property of anti-stripping agent provides better mix quality and surface finish.
- Higher volume of construction & speedy completion of roads.

PACKING:

DURAPAVE EMULSIS Cold Mix is available in

• 200 Kg • MS Drum • RC Drum • New HDPE Drum

FOR TECHNICAL QUERIES, PLEASE CONTACT:

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Anil Thondepu, Manager - Product Marketing





TECHNICAL SPECIFICATIONS

Characteristics	Test			EMULSIS CM		EMULSIS CM-SS2	
Characteristics	Method	CON	Min	Max	Min	Max	
Residue on 600 micron Sieve in % by Mass	IS 8887-2018 ANNEX-B	%	_	0.05	_	0.05	
Viscosity at 25°C by Saybolt Furol Viscometer	IS 3117	Sec	33	40	30	150	
Coagulation at low Temp.	IS 8887-2018 ANNEX-C	_	NIL	NIL	NIL	NIL	
Storage stability after 24 Hrs.	IS 8887-2018 ANNEX-D	%	_	2	_	2	
Particle Charge	IS 8887-2018 ANNEX-E	_	Positive	Positive	Positive	Positive	
Coating ability & water Res	sistance:						
a) Coating, dry aggregate	IS 8887-2018 ANNEX-F	_	Good	Good	Good	Good	
b) Coating, after spraying	IS 8887-2018 ANNEX-F	_	Fair	Fair	Fair	Fair	
c) Coating, wet aggregate	IS 8887-2018 ANNEX-F	_	Fair	Fair	Fair	Fair	
d) Coating, after spraying	IS 8887-2018 ANNEX-F	_	Fair	Fair	Fair	Fair	
Miscibility with water	IS 8887-2018 ANNEX-H	_	No- Coagulation	No- Coagulation	No- Coagulation	No- Coagulation	
Stability to mixing with cement (Coagulation)	IS 8887-2018 ANNEX-G	%	_	2	_	2	
Test on Residue:							
a) Residue by Evaporation	IS 8887-2018 ANNEX-J	%	60	_	60	_	
b) Penetration of Residue at 25°C/ 100gm/ 5Sec	IS 1203-1978	_	60	120	60	120	
c) Ductility of Residue at 27°C	IS 1208-1978	Cm	50	_	50	_	
d) Solubility in Trichloroethylene	IS 1216-1978	%	98	_	98	_	



EMULSION - COLD MIX

DURAPAVE Emulsis CM MS & MS2

APPLICATIONS:

Cold Mix technology is a highly engineered but simple & effective solution. It is used for paving rural roads, farm link roads, and low volume roads.

PRODUCT CERTIFICATIONS: Bureau of Indian Standards (BIS): CM/L- No-3015129

AVAILABLE GRADES: 1) DURAPAVE EMULSIS CM-MS 2) DURAPAVE EMULSIS CM-MS2

SPECIFICATIONS:

DURAPAVE EMULSIS CM-MS & MS2 meets the specifications as per IRC: SP: 100-2014

BENEFITS:

- Energy efficient and environment friendly.
- Low temperature curing.
- Highly adhesive properties.
- Water resistant and enhances easy drainage of water.
- Enhances structural strength of layers.
- Emissions from manufacturing and laying of hot bituminous mixes are eliminated.
- Continuous construction in rainy season.
- Extends construction period in a year.
- Inbuilt property of anti-stripping agent provides better mix quality.
- Higher volume of construction & speedy completion of roads.

TECHNICAL SPECIFICATIONS

Properties	Specification- EMULSIS MS & MS2	Typical test Result CM-MS	Typical test Result CM-MS2
Viscosity at 50°C (Say bolt Viscometer)	50 - 300	54 - 55	54 - 55
Residue on 600 Micron IS Sieve, % max	0.05%	0.002 - 0.02	0.026 - 0.027
Storage Stability after 24 hrs, %	Max 1.0%	0.3 - 0.5	0.3 - 0.5
Binder Residue by Evaporation	Min 65%	65 - 66	65 - 66
Average Setting time, hrs	_	1	4

PACKING: DURAPAVE EMULSIS Cold Mix is available in • 200 Kg • MS Drum • RC Drum • New HDPE Drum

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EMULSION - MEDIUM SETTING

DURAPAVE Emulsis MS

APPLICATIONS:

DURAPAVE EMULSIS MS is ideally suited and designed for:

- Pothole filling/patch work Premix carpet work
- Strong bonding with existing surface High stability of patches.

The product meets the specifications as per IS 8887:2018.

PRODUCT CERTIFICATIONS: Bureau of Indian Standards (BIS): CM/L- No-3015129

BENEFITS:

- Coats and bond loose mineral particles on the surface of the base course in repair works.
- To seal surface pores and make the surface of the base course water-resistant.
- Instant setting and high compaction.

TECHNICAL SPECIFICATIONS

Characteristics	Test	Unit of	Specification	
Characteristics	Method	Measurement	Min	Max
Residue on 600 micron Sieve in % by Mass	IS 8887-2018 ANNEX-B	%	_	0.05
Viscosity at 50°C by Saybolt Furol Viscometer	IS 3117	Sec	50	300
Coagulation of emulsion at low temp.	IS 8887-2018 ANNEX-C	_	NIL	NIL
Storage stability after 24 Hrs.	IS 8887-2018 ANNEX-D	%	_	1
Particle Charge	IS 8887-2018 ANNEX-E	_	Positive	Positive
Miscibility with water	IS 8887-2018 ANNEX-H	_	No- Coagulation	No- Coagulation
Test on Residue:-				
a) Residue by Evaporation	IS 8887-2018 ANNEX-J	%	65	_
b) Penetration of residue at 25°C/ 100gm/ 5Sec	IS 1203-1978	_	60	150
c) Ductility of residue at 27°C	IS 1208-1978	Cm	50	_
d) Solubility in Trichloroethylene	IS 1216-1978	%	98	_

PACKING: DURAPAVE EMULSIS MS is available in • Bulk • 200 Kg • MS Drum • RC Drum • New HDPE Drum

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EMULSION - RAPID SETTING

DURAPAVE Emulsis RS1

APPLICATIONS:

DURAPAVE EMULSIS RS1 emulsion is manufactured in state of the art formulation process and quality control. It is applied on aged and primed bituminous surfaces. The product meets the specifications as per IS 8887:2018.

PRODUCT CERTIFICATIONS: Bureau of Indian Standards (BIS): CM/L- No-3015129 **BENEFITS:**

- Maintain good bond between the existing layer and new bituminous layer.
- Strong resistance to movement of structural layers.
- Forms strong water resistant layer to prevent any water table changes.
- Seal the pores and make the surface water resistant.
- Provides good adhesion between the layers on good spraying.

TECHNICAL SPECIFICATIONS

Chamatanistics	Test	Test Unit of		Specification	
Characteristics	Method	Measurement	Min	Max	
Residue on 600 micron Sieve in % by Mass	IS 8887-2018 ANNEX-B	%	_	0.05	
Viscosity at 50°C by Saybolt Furol Viscometer	IS 3117	Sec	20	100	
Coagulation of emulsion at low Temp.	IS 8887-2018 ANNEX-C	_	NIL	NIL	
Storage stability after 24 Hrs.	IS 8887-2018 ANNEX-D	%	_	2	
Particle Charge	IS 8887-2018 ANNEX-E	_	Positive	Positive	
Miscibility with water	IS 8887-2018 ANNEX-H	_	No- Coagulation	No- Coagulation	
Test on Residue:-					
a) Residue by Evaporation	IS 8887-2018 ANNEX-J	%	60	_	
b) Penetration of Residue at 25°C/ 100gm/ 5Sec	IS 1203-1978	_	80	1 5 0	
c) Ductility of Residue at 27°C	IS 1208-1978	Cm	50		
d) Solubility in Trichloroethylene	IS 1216-1978	%	98	_	

PACKING: DURAPAVE EMULSIS RS1 is available in • Bulk • 200 Kg • MS Drum • RC Drum • New HDPE Drum

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EMULSION - SLOW SETTING

DURAPAVE Emulsis SS1 [IS]

APPLICATIONS:

DURAPAVE EMULSIS SS1 is specially designed oil based bituminous emulsion with low viscosity extended setting time and stability with cement. It is an ideal product for coating WM M/WBM surfaces. The product meets the specifications as per IS 8887:2018.

PRODUCT CERTIFICATIONS: Bureau of Indian Standards (BIS): CM/L- No-3015129

BENEFITS:

- High penetration of the existing base course.
- Sealing of loose mineral particles.
- To harden the base course.

TECHNICAL SPECIFICATIONS

Characteristics	Test	Unit of	Specification			
Characteristics	Method	Measurement	Min	Max		
Residue on 600 micron Sieve in % by Mass	IS 8887-2018 ANNEX-B	%	_	0.05		
Viscosity at 25°C by Saybolt Furol Viscometer	IS 3117	Sec	20	100		
Coagulation of emulsion at low Temp.	IS 8887-2018 ANNEX-C	_	NIL	NIL		
Storage stability after 24 Hrs.	IS 8887-2018 ANNEX-D	%	_	2		
Miscibility with water	IS 8887-2018 ANNEX-H	_	Immiscible	Immiscible		
Distillation, By Volume at:	Distillation, By Volume at:					
a) 190°C	_	%	20	55		
b) 225°C	_	%	30	75		
c) 260°C	_	%	40	90		
d) 316°C	_	%	60	100		
e) Residue at 360°C	IS 1213-1978	%	50	_		
Water Content, by Mass	IS 1211-2018	%	_	20		
Test on Residue:						
a) Solubility in Trichloroethylene	IS 1216-1978	%	98	_		

PACKING: DURAPAVE EMULSIS SS1 is available in • Bulk • 185 Kg • MS Drum • RC Drum • New HDPE Drum

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EMULSION - SLOW SETTING

DURAPAVE Emulsis SS2

APPLICATIONS:

DURAPAVE EMULSIS SS2 a specially designed tailor-made water based bituminous emulsion with medium viscosity and extended setting time and stability with cement. The product meets the specifications as per IS 8887:2018.

PRODUCT CERTIFICATIONS: Bureau of Indian Standards (BIS): CM/L- No-3015129

BENEFITS:

- Binds loose aggregates.
- Good penetration in to the base course.
- Makes the base course water resistant.

TECHNICAL SPECIFICATIONS

Characteristics	Test	Unit of	Specification	
Characteristics	Method	Measurement	Min	Max
Residue on 600 micron Sieve in % by Mass	IS 8887-2018 ANNEX-B	%	_	0.05
Viscosity at 25°C by Saybolt Furol Viscometer	IS 3117	Sec	30	150
Coagulation of emulsion at low Temp.	IS 8887-2018 ANNEX-C	_	NIL	NIL
Storage stability after 24 Hrs.	IS 8887-2018 ANNEX-D	%	_	2
Particle Charge	IS 8887-2018 ANNEX-E	_	Positive	Positive
Miscibility with water	IS 8887-2018 ANNEX-H	_	No- coagulation	No- coagulation
Test on Residue:				
a) Residue by Evaporation	IS 8887-2018 ANNEX-J	%	60	-
b) Penetration of Residue at 25°C/ 100gm/ 5Sec	IS 1203-1978	_	60	120
c) Ductility of Residue at 27°C	IS 1208-1978	Cm	50	_
d) Solubility in Trichloroethylene	IS 1216-1978	%	98	_

PACKING: DURAPAVE EMULSIS SS2 is available in • Bulk • 200 Kg • MS Drum • RC Drum • New HDPE Drum

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EMULSION - SLOW SETTING

DURAPAVE Emulsis CSS1 (H)

APPLICATIONS:

DURAPAVE EMULISIS CSS-1H is used as:

Prime Coat
 Fog seal/crack seal
 Slurry seal

The product meets the specifications as per ASTM D2397-13.

PRODUCT CERTIFICATIONS: Bureau of Indian Standards (BIS): CM/L- No-3015129

BENEFITS:

- Excellent penetration into miniature pores of sub bases.
- Extended breaking easy spray.
- Penetrate the cracks & crevices and impart strength to the layers.
- Bonds well to cool, damp substrates/surfaces and Low temperature cure.
- Bind loose aggregates together strongly.
- Highly adhesive with multiple applications.

TECHNICAL SPECIFICATIONS

Characteristics	Test	Unit of	Specification ASTM D2397-13	
	Method	Measurement	Min	Max
Residue on 850 micron Sieve in % by Mass	ASTM D6933	%	_	0.10
Viscosity at 25°C by Saybolt Furol Viscometer	ASTM D244	Sec	20	100
Storage stability after 24 hrs	ASTM D6930	%	_	1
Partical Charge	ASTM D244	_	Positive	Positive
Stability to mixing with cement (% Coagulation)	ASTM D6935	%	_	2
Test on Residue:				
a) Residue by Evaporation	_	%	57	_
b) Penetration of Residue at 25°C/ 100gm/ 5Sec	-	-	40	90
c) Ductility of Residue at 27°C	ASTM D244	Cm	40	-
d) Solubility in Trichloroethylene	-	%	97.5	-

PACKING: DURAPAVE EMULSIS CSS-1H is available in • Bulk • 200 Kg • MS Drum • RC Drum • New HDPE Drum

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