

भारतीय प्रौद्योगिकी संस्थान रूड़की

जानपद अभियांत्रिकी विभाग

रूड़की-247667, उत्तराखण्ड, भारत



Indian Institute of Technology Roorkee

Department of Civil Engineering

ROORKEE-247667, Uttarakhand, INDIA

Dr. Rajat Rastogi

Professor

Transportation Engineering Group

IITR/CED/TEG/RR/GR\_Infra/344/  
Dated: Dec 12, 2025

To: **G R Infra Projects Limited**  
Emulsion and Theroplastic Road Marking Paint Plant,  
E 270, E-270B, E 271, BHAMASHAH INDUSTRIAL AREA,  
KALADWAS, GIRWA, Udaipur, Rajasthan, 313001.

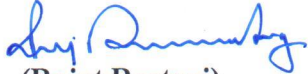
Subject: Testing of RS-1 and SS-1 Bitumen Emulsion

Ref: Email dated 03.11.2025 from [lab.emul@grinfra.com](mailto:lab.emul@grinfra.com)

Dear Sir,

With reference to your above-mentioned letter, kindly find herein the report of emulsion tests being done in our laboratory on the sample being provided by your office.

Sincerely,

  
(Rajat Rastogi) 12.12.2025

**RESULTS OF TESTS PERFORMED IN LABORATORY**

## A) Test Results for Bitumen Emulsion for Roads: SS-1


S. No.	Characteristics	Results
1	Residue on 600 micron IS Sieve, percent by mass	0.01
2	Viscosity by Saybolt Furol Viscometer, Seconds, at 25°C	66
3	Coagulation of emulsion at low temperature	Nil
4	Storage stability after 24 h, percent	0.28
5	Miscibility with water	Immiscible
6	<b>Test on Residue</b>	
a	Solubility in trichloroethylene, percent by mass	98.90
7	Water content, percent by mass	11.20
8	Distillation in percent, by volume at:	
	190°C	43.21
	225°C	63.58
	260°C	86.12
	316°C	93.44
	Residue at 360°C, percent	50.80

Remarks: Product SS-1 meets all quality parameters as per IS:8887:2018

## B) Test Results for Bitumen Emulsion for Roads: RS-1

S. No.	Characteristics	Results
1	Residue on 600 micron IS Sieve, percent by mass	0.01
2	Viscosity by Saybolt Furol Viscometer, seconds, at 50°C	43
3	Coagulation of emulsion at low temperature	Nil
4	Storage stability after 24 h, percent	0.36
5	Particle Charge	Positive
6	Miscibility with water	No Coagulation
7	<b>Test on Residue</b>	
a	Residue by evaporation, percent	64.09
b	Penetration 25°C/100g/5 sec.	114, 115, 118
c	Ductility 27°C/cm	Full length (100)
d	Solubility in Trichloroethylene, percent by mass	99.40

Remarks: Product RS-1 meets all quality parameters as per IS:8887:2018

  
Rajat Rastogi 12.12.2025

डॉ० रजत रस्तोगी / Dr. Rajat Rastogi  
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