

IL&FS Transportation Networks Limited

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Mumbai - 400 051, INDIA		CIN L45203MH2000PLC129780

ITNL-KSEL/PRJ/TEC/COO-587/1005

2nd March, 2015

To,
GHV (INDIA) Private Limited,
Mhaloba Phata, At Malwadi,
Khambala P.O., Sinnar,
Nashik - 422 606.

Project: Four Lanning of Khed-Sinnar Section of NH-50 from Km 139.075 to Km 179.946 under NHDP Phase IV in the state of Maharashtra on DBFOT Basis.

Subject: Review of Company credentials of M/s Kotak Asphalt (for VG-40 Bitumen & RS-1 & SS-1 Emulsions) - Reg.

Ref: IE letter No. : SAICPL-DCSPL/Khed-Sinnar/IE/NH-50/2015/452, dated 2/03/2015.
GHV Lr. No.: GHV/KSEL/2014/102, dated 20/11/2014.
GHV Lr. No.: GHV/KSEL/2014/122, dated 22/01/2015.

Dear Sir,

With reference to the captioned subject and IE letter referred above, please find enclosed herewith the IE communicating their review comments on the subject matter.

IE has communicated their concurrence for source approval subject to the submission of satisfactory third party test reports.

We hereby request you to do the needful arrangement for submitting the required third party test results at the earliest please.

This is for your information and needful please.

Yours Faithfully,
For IL&FS Transportation Networks Ltd.


S.P. Singh
Associate Vice President.

Encl: IE letter as referred above.

CC: M/s Montecarlo Ltd.
M/s RSIPL Ltd.



In Association with



SA INFRASTRUCTURE CONSULTANTS PVT. LTD.
Engineers, Economists and Project Managers

DHRUV CONSULTANCY SERVICES PVT. LTD.

No: SAICPL-DCSPL/Khed-Sinnar/IE/NH-50/2015/452

Date: 2nd March 2015.

To,
The Authorized Signatory,
M/s Khed-Sinnar Expressway Ltd,
Nasik (Maharashtra) - 422009

Sub: Independent Engineer Services for four Laning of Khed -Sinnar Section of NH-50 from km. 42.000 to km. 177.000 under NHDP Phase IV in the State of Maharashtra on DBFOT (Toll) Basis -Reg. Review of Factory Visit reports of KOTAK ASPHALT for supply of VG-40 bitumen, RS-1 & SS-1 Emulsions and Concurrence.

Ref: 1. Your Office letter No. KSEL/ PRJ/TEC/ ICO-581/810 Dated 16.12.2014
2. Your Office letter No. KSEL/ PRJ/TEC/ ICO-581/906 Dated 23.01.2015

Sir,

With reference to your letters mentioned above, the credentials and Factory Visit reports of KOTAK ASPHALT for supply of VG-40 bitumen, RS-1 & SS-1 Emulsions, have been reviewed.

Based on the Credentials and factory visit reports, it is concurred, subject to the submission of satisfactory third party test reports.

Thanking you,

Yours Sincerely,
SA Infrastructure Consultant Pvt. Ltd.
In association with
Dhruv Consultancy Services Pvt.Ltd.

C. D. Fakir
(Team Leader)

CC to: 1. The General Manager (T) & Project Director, National Highway Authority of India, Project Implementation Unit, Nasik, for information 2. M/s SA Infrastructure Consultants Pvt. Ltd. Gaziabad.
3. M/s Dhruv Consultancy Services Pvt. Ltd. 4. RE Manchar /Sangamner/SBE/SQME

Team Leader's Office:

SAICPL-DCS Office: 101-102, CS-1, Gyan Khand - II, Indraprastha, Ghaziabad: 201 014 (UP), India, Tel. No.: +91-120-2607756, Fax. No.: 91-120-2607757, E-mail: info@sainfra.com
SAICPL-DCS, Flat no. 4 & 5, First Floor, DSR's Centre, (behind Hotel Indrayani), Manchar: 410 503, Distt. Pune, Maharashtra, Tel no. 02133-225191, Email id: ih_nh50@sainfra.com



FISPL/JSTL/14-15/1022

Date: 19.1.2015

To,
Vice President & Site head,
JETPUR SOMNATH TOLLWAYS PRIVATE LIMITED
301-304, BALAJI PALACE,
MADHURAM, TIMBAVADI, SOMNATH HIGHWAY, JUNAGADH-362001

Sub. :- Project Management Consultancy Services for four-laning of Jetpur-Somnath Section of NH-8D from KM 0.000 to 127.000 in the state of Gujarat to be executed on BOT (Toll) Basis DBFOT pattern under NHDP Phase III
- Third Party Test Reports and Factory inspection report for source approval of M/s Kotak Asphalt as a Manufacturer and supply of Bitumen Emulsion.

Ref.: 1. IE letter No. ICT/IC/NHAI/IND/NH-8D/JSTPL/1439 dated 12.12.2014
2. JSTPL letter No. JSTPL/PMC/454/2014 dated 13.12.2014
3. BEL Letter No. : BEL/JSTL/SITE/PMC/1524 dated 15.01.2015

Dear Sir,

This has reference as above.

A Joint Factory inspection of M/s Kotak Asphalt, Manufacturer and supplier of Bitumen Emulsion, was done by IE/EPC/PMC representative as per the instruction of IE vide their letter under reference '1'. The process of manufacturing and quality control at plant was found satisfactory.

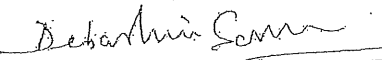
Also a Joint sampling for Emulsion was done at factory for Third Party testing. The Third Party Test results received confirms to the requirement of specification.

In view of above, M/s Kotak Asphalt can be recommended as for supply of Bitumen Emulsion for our project works.

Enclosed please find a Joint Factory Inspection report along with Third Party Test results for your reference and for forwarding the same to IE for their final approval.

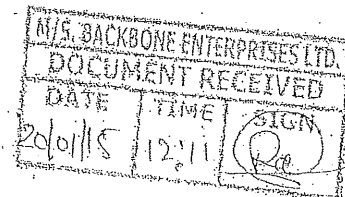
Thanking you & assuring our best services at all the time.

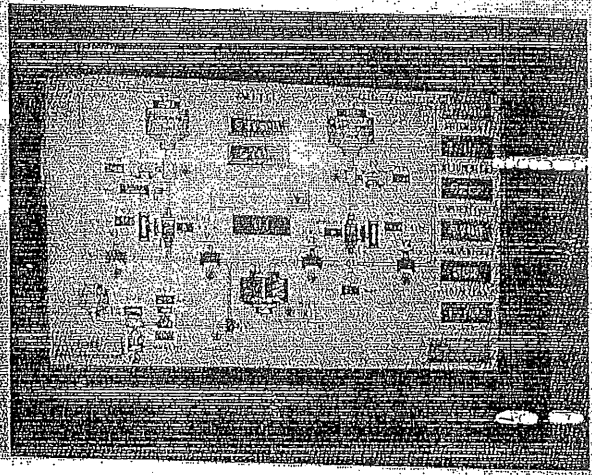
Yours Sincerely,


(D. Sarkar)
Team Leader, PMC - JSTPL Project
Feedback Infra Private Limited, Junagadh, Gujarat

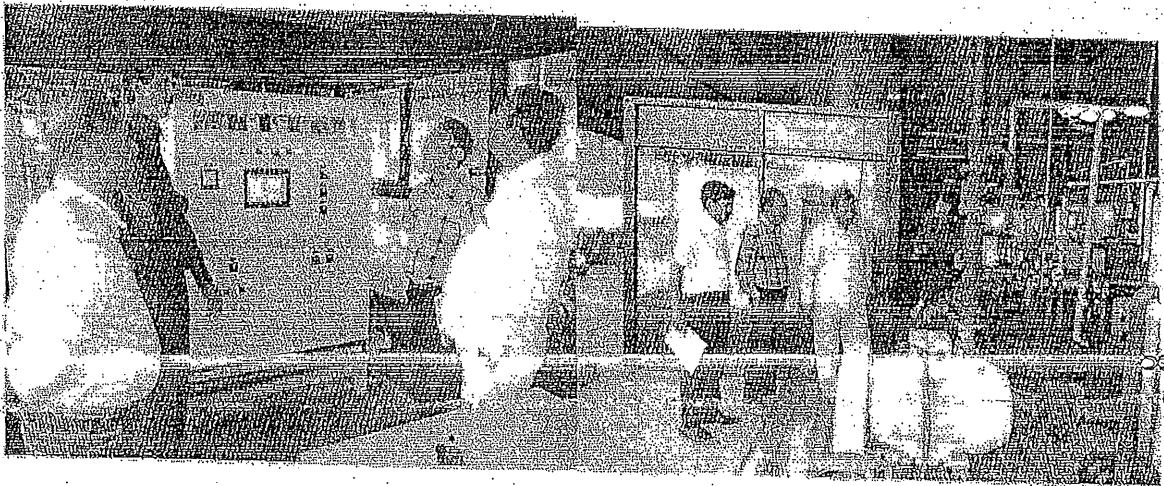
Encl.: As above (In two copies)

Cc To: - 1) Mr. P. K. Mohanty, Project Director, Backbone Enterprises Ltd., Junagadh



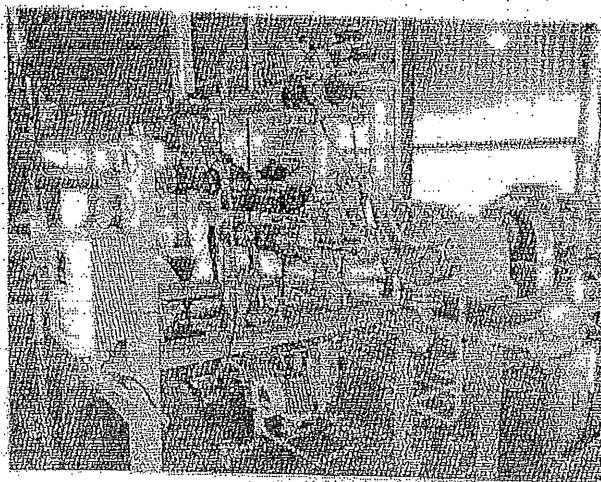


A Short Brief about the Plant by Kotak Rep. Automatic PLC System for Manufacture of Emulsion.

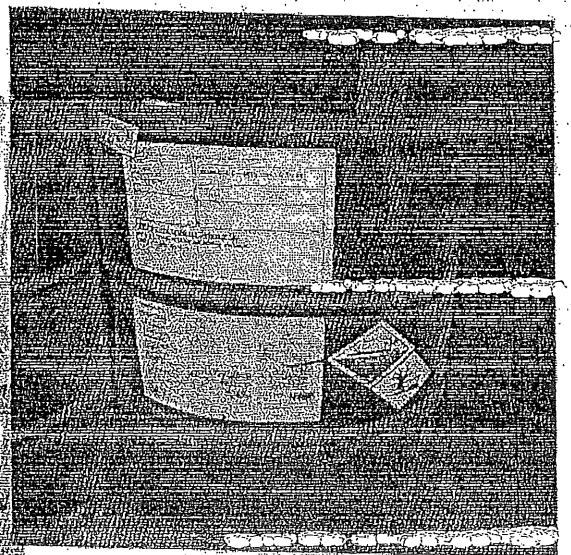


Explaining of Automatic Process for Production of Emulsion to IE and PMC Rep.

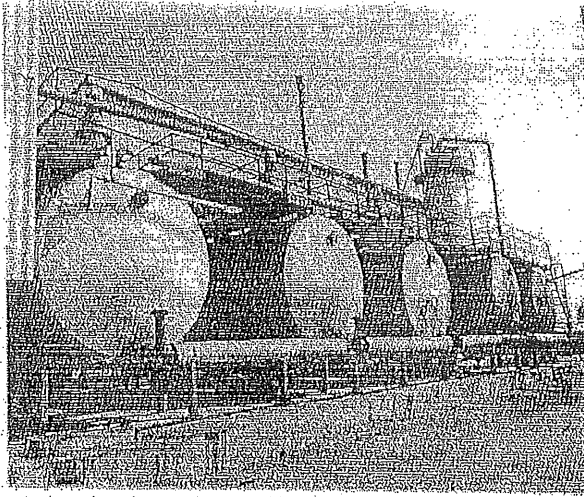
Inspection of Emulsifier System



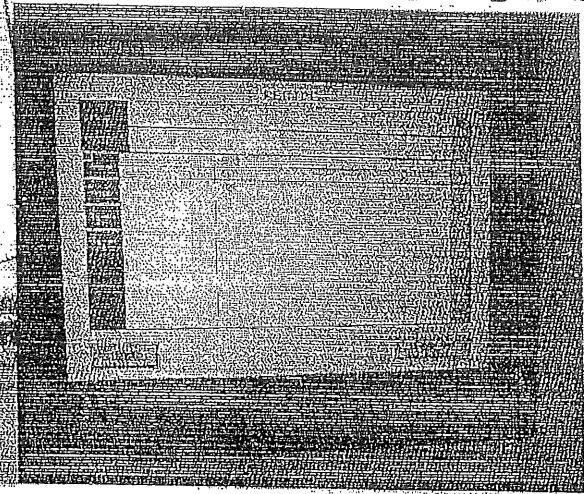
Automatic Emulsion Manufacture Plant



Imported (from USA) Emulsified Agent



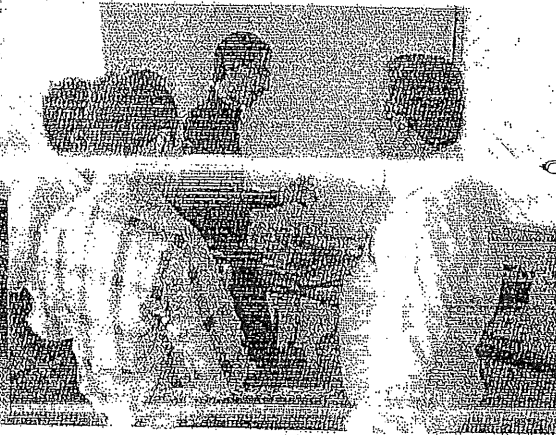
View of Emulsion Storage Tanks



Display of Emulsion RS-1 Recipe at PLC



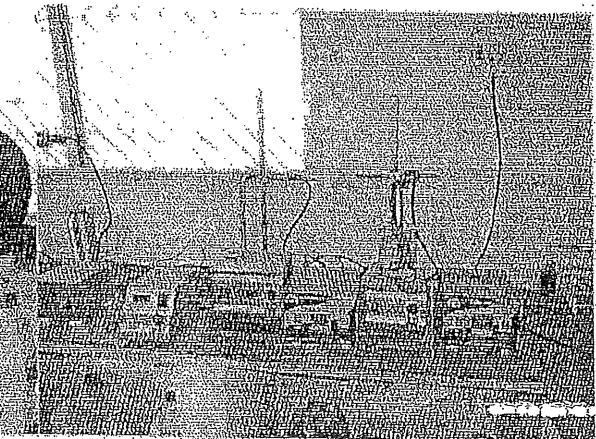
Viscosity Test by Saybold Furol Viscometer



Residue on 600 Micron Sieve



Miscibility with Water Test



Bitumen & Emulsion Test Equipments

Handwritten signature:
Amita
masojana@alcatel



GUJARAT ENGINEERING RESEARCH INSTITUTE

Race Course, Vadodara - 390 007 (India)

Narmada Water Resources & Wafer Supply, & Kalpsar Department

GERI

Government of Gujarat

STATEMENT SHOWING TEST RESULTS OF CATIONIC EMULSIFIED ASPHALT TEST RESULTS

NAME OF WORK : Testing of Bitumen Emulsion RS-1 & SS-1 from Kotak Asphalt Corporation LLP,
Jamnagar.

MATERIAL : Cationic Emulsified Asphalt

SUPPLIED BY : Feedback Infra Private Ltd., Project Management Consultant, Jetpur - Somnath
Toll way Ltd., Junagadh - Somnath Highway Dist. Junagadh 362 001

BITUMEN TYPE : Cationic Slow Setting (SS-1)

NAME OF MANUFACTURER : Kotak Asphalt Corporation LLP, Jamnagar

TANKER NO. _____

DATE OF SAMPLING: 17-12-14

D/S NO. : 10/14

LAB NO. : 12/14

DATE OF TESTING: 03-01-15 to 06-01-15

Sr. No	CHARACTERISTICS	Lab. Test Results Average value	Requirements of Slow Setting (SS-1) as per IS:8887:2004
1	Viscosity by SFV, Sec. at 25°C	51.3	Min: 20 - Max: 100
2	Particle Charge	Weak Positive	Weak Positive
3	Residue on 800 mic. Is. Sieve test %, Max	0.04	0.05
4	Storage stability test, %, Max	0.5	2.0
5	Tests on residue:		
	Residue by evaporation, % Min	56.75	50
	Penetration at 25°C/100 g/5 Sec	62.6	Min: 60 - Max: 350
	Ductility at 27°C cm/Min	86.0	50
	Solubility in Trichloroethylene, % Min	98.5	98

Note:

1. Test result relates to the sample supplied by supplier.
2. The test results pertain to the sample of 5 kg, only supplied by you.
3. Results / Report is issued with specific understanding that 'GERI' will not in any case be involved in actions following the interpretation of test results.
4. The Report/ Results are not supposed to be used for publicity.

❖ As per IS-8887:2004, testing of Bitumen Emulsion should be carried out within 7 days from the date of sampling. However, this sample is tested on the request of the agency.

Tested by: *[Signature]*

[Signature]
Asstt. Research Officer
Road Research Sub-Div. 2,
GERI, Vadodara



GERI

GUJARAT ENGINEERING RESEARCH INSTITUTE

Race Course, Vadodara - 390 007 (India)

Narmada Water Resources & Water Supply, & Kalpsar Department

Government of Gujarat

STATEMENT SHOWING TEST RESULTS OF CATIONIC EMULSIFIED ASPHALT
TEST RESULTS

NAME OF WORK : Testing of Bitumin Emulsion RS-1 & SS-1 from Kotak Asphalt Corporation LLP,
Jamnagar

MATERIAL : Cationic Emulsified Asphalt

SUPPLIED BY : Feedback Infra Private Ltd., Project Management Consultant, Jetpur - Somnath
Tollway Ltd., Junagadh - Somnath Highway Dist. Junagadh 362 001

BITUMEN TYPE : Cationic Rapid Setting (RS-1)

NAME OF MANUFACTURER : Kotak Asphalt Corporation LLP, Jamnagar

TANKER NO. : —

DATE OF SAMPLING : 17-12-14

D.S. NO. : 10/14

LAB NO. : 11/14

DATE OF TESTING : 03-01-15 to 06-01-15

Sr. No	CHARACTERISTICS	Lab. Test Results Average value	Requirements of Rapid Setting (RS-1) as per IS:8887:2004
1	Viscosity by SFV Sec. at 50°C	22.0	Min. 20 - Max. 100
2	Particle Charge	Positive	Positive
3	Residue on 600 mic. Is Sieve test %, Max	0.04	0.05
4	Storage stability test, %, Max	0.93	2.0
5	Miscibility with water test	No Coagulation	No Coagulation
6	Tests on residue		
	Residue by evaporation %, Min	65.17	60
	Penetration at 25°C / 100g/5 Sec	86.0	Min. 80 - Max. 150
	Ductility at 27°C cm/Min.	58.0	50
	Solubility in Trichloroethylene, %, Min	99.0	98

Note:

1. Test result relates to the sample supplied by supplier.
2. The test results pertain to the sample of 5 kg. only supplied by you.
3. Results / Report is issued with specific understanding that 'GERI' will not in any case be involved in actions following the interpretation of test results.
4. The Report / Results are not supposed to be used for publicity.

* As per IS:8887:2004, testing of Bitumen Emulsion should be carried out within 7 days from the date of sampling. However, this sample is tested on the request of the agency.

Tested by: *[Signature]*

[Signature]
Asstt. Research Officer
Road Research Sub Div. 2
GERI, Vadodara

**NATIONAL HIGHWAYS AUTHORITY OF INDIA
(NHAI)**

PROJECT

Four Lanning of Jetpur-Somnath Section of NH 8D from Km 0.000 to 127.690 (Design Length 123.454) in the State of Gujarat under NHDP Phase III on BOT (Toll) Basis under DBFOT pattern.

Test Report on

Factory Visit &

Third Party Test Report

of Bitumen Emulsion

for

KOTAK ASPHALT.

CLIENT



NATIONAL HIGHWAYS AUTHORITY OF INDIA

INDEPENDENT
ENGINEER



INTERCONTINENTAL CONSULTANTS &
TECHNOCRATS PVT. LTD.

CONCESSIONAIRE



JETPUR-SOMNATH TOLLWAYS PVT. LTD.

PMC



FEEDBACK INFRASTRUCTURE SERVICES PVT.
LTD.

EPC



BACKBONE ENTERPRISES LIMITED

KOTAK ASPHALT FACTORY VISIT AND THIRD PARTY TEST REPOTS

(For Bitumen Emulsion)

Location: Nana Lakhya, Jamnagar (GJ) (Date: 16.12.2014)

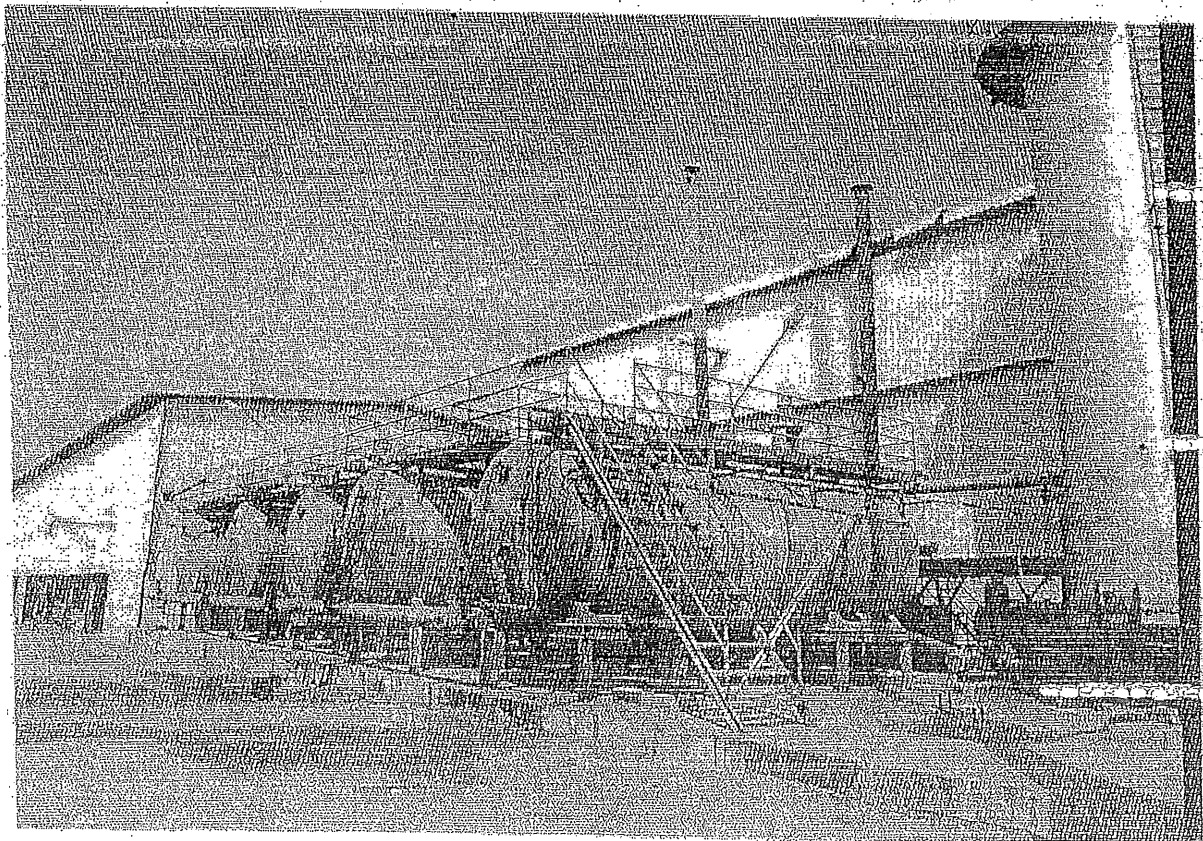
Report on Factory Visit:

A team of three members from IE and PMC along with EPC representative has been visited the manufacturer's premises of Kotak Asphalt, Nana Lakhya, Jamnagar (GJ) for inspection, manufacture process and testing of Bitumen Emulsion for our Jetpur-Somnath Four Lanning Road Project. While our factories visit we have found all the processing till the final product in order means as per specification and a joint sample has been taken for testing at laboratory available in factory premises as well as third party testing.

All the test conducted at both were found satisfactory as per specification (IS: 8887)

Some of photo graphs given with the detailed art of process during visit.

M/s Kotak Asphalt Factory, Nana Lakhya, Jamnagar (GJ)





Kotak Asphalt

Plant: Village Nania Lakhya, T. Lalpur, Jamnagar Dwarka Road, Jamnagar 361 280

TEST REPORT

(IS 8887:2004)

Batch No.59/14-15.

Product - Emulsion - RS 1

Dt. 12.12.2014

Properties	Requirement	Result
Residue on 600 micron sieve	0.05 Max	0.03
Viscosity by Saybolt Furol viscometer At 50 Deg. C	20-100	25
Coagulation at low temperature	Nil	Nil
Storage stability after 24 hrs	2 % max	≤ 2
Particle charge	+ Ve	+ Ve
Miscibility with water	No. Coagulation	No. Coagulation
Test on residue		
Residue by evaporation min	60	61.9
Penetration at 25 Deg. C	80-150	88
Ductility at 27 Deg. C	50	59
Solubility in trichloroethylene (Mins)	98	99.4

Following test are conducted in presence of representative of IE, PMC, EPC

1. Residue on 600 Micron sieve.
2. Viscosity by Saybolt Furol Viscometer @ 50° C
3. Miscibility with water
4. Residue by evaporation %

KOTAK REP.

EPC REP.

PMC REP.

IE REP.

Correspondence Address : Standard House, 2nd Floor, Indira Gandhi Marg, Jamnagar 361001
Tel.: (0288) 2553648; 2770060, 09824850777; Fax: (0288) 2553873; Email: krmkotak@kotakgroups.com