KAVASSU®

Jahan Hum Hain... Wahan Dum Hai

SHALIMAR

STRENGTH OF CONSTRUCTION

KAVASSU - CRUM

Real Revolution

INTRODUCTION :

SHALIMAR SEAL & TAR PRODUCTS PVT. LTD. is pioneer in Manufacturing / Marketing well known Shalimar brand high performance construction chemicals and waterproofing products. Various product segments are given below :

- WATER REDUCING ADMIXTURES (PLASTICIZERS & SUPER PLASTICIZERS)
- CURING COMPOUNDS
- INTEGRAL CEMENT WATERPROOFING COMPOUNDS
- JOINT FILLERS / SEALANTS
- FOAMING/ RETARDERS/ ACCELERATING/ AIR ENTRAINING AGENTS/ HYPER PLASTICIZERS
- GROUTS & ANCHORS
- INDUSTRIAL FLOORINGS
- INSULATION PROTECTION
- SILICON SEALANTS
- ADHESIVES / TILE GROUTS
- WATERPROOFING CEMENTITOUS
- ACRYLIC WATERPROOFING COATINGS
- DAMP PROOFING COARSE / EXTERNAL WALLS SEALANT
- PRIMERS / MISLENEOUS COATINGS
- ROAD EMULSION / FILLERS / GENERAL & INDS. BITUMEN
- APP & SBS MODIFIED MEMBRANES & BITUMEN FELTS
- ANTI CORROSIVE / RUST REMOVER & CONVERTOR COATINGS

All products are manufacturing by India's biggest Plant of its kind. M/s. Shalimar Seal & Tar Products Pvt. Ltd., an ISO 9001 accredited company having a highly equipped in-house Research & Development laboratory with ultra modern facilities for manufacturing a quality product under technical guidance & specifications provided by both Shalimar Seal & Tar Products Pvt. Ltd. & M/s. Kavassu International Pvt. Ltd. Products are backed by world's leading company NILE WATERPROOFING COMPANY Egypt, ISOLTEMA SPA, Italy & CAPITAL UNITED, Canada. All products are timetested with varying climatic conditions through out India and have got very strong history of service and case studies in various application areas viz-a-viz construction of Buildings, Factories, Harbors, Dams, Canals, Bridges Atomic, Thermal, Hydel Power projects, Tunnels, Sub-way Boxes, Tube Railways, Roadways, NHAI etc. Shalimar's have got a wide range of products includes some special products, which are obviously not in our product range because of their end use in specific applications. Details can be provided on request. All products are manufacturing by using indigenous as well as imported raw materials to meet out the international quality standards & design to combat water and dampness in structures. All products are easy to use, environment eco-friendly and provide the user a very cost-effective remedy to sort out the problems, which unless and until considered unsolvable.

CRUM RUBBER MODIFIED BITUMEN

DESCRIPTION

Kavassu Crum is a Crumb Rubber based Modified Bitumen produced by blending crumb rubber and other additives compatible with bitumen grade VG - 10, VG -20 & VG - 30. Kavassu Crum which is crumb rubber modified bitumen (CRMB), is prepared in a centrally located state-of-the-art plant equipped with special high shear mixing facility, with high sheer homogenizer the first of its kind in our country. Kavassu Crum has been specially designed after extensive research to meet the requirements of high traffic intensity, increasing axle & pointloads, and varying climatic conditions throughout the country.

Kavassu Crum is the ideal binder to overcome the concurrent problems of raveling, rutting, undulations, cracking, bleeding, shoving and pot-holding in existing bituminous pavement. Bituminous mix, prepared with Kavassu Crum has a higher stiffness modulus, enhanced fatigue life,better resistance to creep & higher indirect tensile strength and quite suitable as renewal course & overlay materials on surface which are badly cracked and subjected to heavy traffic

Crumb Rubber Modified Bitumen is recommended for roads with heavy traffic and located in extreme climatic conditions. Kavassu Crum performs better than neat bitumen in heavy rainfall areas and in situation where the aggregates are prone to stripping. Due to its better creep resistance properties, Kavassu Crum can also be used at busy intersections, bridge decks, and round about for increased life of surfacing. Kavassu Crum also finds useful applications in porous asphalts. The selection of the grade of Kavassu Crum will be based on traffic intensity and climatic conditions as given in page no. 2. Even it is much better than using antistriping compound with bitumen for getting better coating on aggregates.

KAVASSU®
Jahan Hum Hain... Wahan Dum Hai

SHALIMAR
STRENGTH OF CONSTRUCTION

KAVASSU CRUM

Real Revolution

TESTED BY

Kavassu Crum is produced in a state of the art central plant with a high sheer blender & homogenizer as per the guidelines laid down by IRC SP: 53 & Indian standard IS:15462 specifications for Polymer & Rubber Modified Bitumen. Kavassu Crum has been tested by premier institutes of the our country like Delhi Test House, NewDelhi, Star Wire Laboratories Faridabad, Ministry of Small & Medium & Micro Enterprises Hyderabad etc. as per IRC: SP: 53 and IS: 15462 & has been found to fully meet the guidelines and standard specifications. Kavassu Crum has given excellent field performance & is found to be cost effective in long term applications. Kavassu Crum is available in bulk as well as in drums.

ADVANTAGES

Homogenous product free from separation & settlement.
Improves adhesion between aggregate and binder.
Higher resistance to deformation at elevated pavement temperature.
Higher fatigue life of mixes.
Delay of cracking and reflective cracking.
Lower susceptibility to seasonal temperature variations.
Improved ageing resistance.
Improved resistance to stripping/moisture damage.
High Marshall stability.
Overall improved performance in extreme climatic and under heavy traffic conditions.
Does not require change in construction practices/machinery.
Overall improved performance in extreme climatic conditions and under heavy traffic conditions

GRADES

Kavassu Crum is available in three grades:
Kavassu Crum 50 (CRMB 50), Kavassu Crum 55 (CRMB 55)
Kavassu Crum 60 (CRMB 60). Conforming to IS:15462 & IRC; SP: 53

SELECTION CRITERIA

Minimum Pavement Temperature ^{0}C	Maximum Atmospheric Temperature, ^{0}C			
		<35	35 to 45	>45
	<-10	Kavassu Crum 50*	Kavassu Crum 55	Kavassu Crum 55
	10 to -10	Kavassu Crum 50	Kavassu Crum 55	Kavassu Crum 60
	>10	Kavassu Crum 55	Kavassu Crum 55	Kavassu Crum 60

*Not below 150C
Temperature of mixing and rolling shall be slightly higher than conventional bituminous mixes.

STAGEWISE TEMPERATURE REQUIREMENT

Stage of work	Indicated temperature ^{0}C
Binder at mixing	165-185
Mix at mixing plant	140-160
Mix at laying site	130-150
Rolling at laying site	115-135

PROPERTIES

SL	Characteristics	Grade			Method of Test
		Kavassu Crum 50	Kavassu Crum 55	Kavassu Crum 60	IS No
i)	Peneration at 25^0 Cm 0.1 mm, 100 g, 5s	<70	<60	<50	1203
ii)	Softening point (R&B), ^{0}C, Min	50	55	60	1205
iii)	Flash point , COC, ^{0}C, Min	220	220	220	1209
iv)	Elastic recovery of half thread in ductile meter at 15^{0}C, percent Min	50	50	50	Appen.1 of IRC:SP:53-2002/ Annex. A of IS 15462:2004
v)	Separation, difference in softening point (R&B), ^{0}C, Max	4	4	4	Appen.1 of IRC:SP:53-2002/ Annex. B of IS 15462:2004
vi)	Viscosity at 150^{0}C, Poise Requirement of IS 15462:2004	1-3	2-6	3-9	1206 (part 2)
vii)	Thin film oven test and tests on residue				
	Loss in mass, percent, Max	1.0	1.0	1.0	9382
	Increase in softening point ^{0}C, Max	7	6	5	1205
	Reduction in penetration of residue, at 25^{0}C, percent, Max	40	40	40	1203
	Elastic recovery of half thread in ductile meter at 25^{0}C, percent, Min	35	35	35	Appen.1 of IRC:SP:53-2002/ Annex. A of IS 15462:2004

QUALITY ASSURANCE

As per ISO-9001

NSIC - CRISIL SE 1B
Crisil Verified

UKAS QUALITY MANAGEMENT
An ISO 9001 Certification

winner of BUSINESS GAURAV
SME AWARDS 2012
Presented By
NSIC • D&B • AXIS BANK

BituNil
NILE Waterproofing Co.,
Cairo - Egypt

CAPITAL UNITED
Canada

Manufactured By:

SHALIMAR SEAL & TAR PRODUCTS PVT. LTD.

Plot No.:148, Village: Mansarkhedi, Bassi - 303301(India).

B - 6, 7 & 8, Jaipur Tower, Opp. All India Radio, M.I.Road, Jaipur - 302001, Rajasthan (India).
Ph:+ 91-141-4025184,3919884, 2364228, 5104528.
FAX: +91-141-2370004
E-Mail: sales@shalimartar.com, support@shalimartar.com

Manufacturing Plants Locations:

AHMEDABAD ■ JAIPUR ■ PUNE

Registered Office :
C-88, Capital House, Subhash Nagar, Jaipur-302016 (India)

Under Lic. 14827.04 issued by ICL Australia, New Zealand
PCC RPCB/ROJPR (S) BAS/93/2798 for Mfg.8500 M.T./Year
District Industries Center Mfg. Lic.No. 17/13/64932

CUS. CARE: +91-9829065184, 8003993311, 9822555752

www.shalimartar.com

IMPORTANT NOTE :
Products are available at all leading cement, hardware, Tile & Paint stores through our wide network of distributors across the country. The product information & application details given by the company & agents has been provided in good faith & meant to serve only as a general guideline during usage. Users are advised to carry out tests & take trials to ensure the suitability of products meeting their requirement prior to full-scale usage of our products. Since the correct identification of the problems, quality of other materials used & on-site workmanship are factors beyond our control there are no expressed or implied guarantee/warranty to the results obtained. The company does not assume any liability or any consequential damage for less than satisfactory results, arising from the use of our products. The leaflet supersedes the previous one and a new issue may take place without notice to supersede this edition as and when it becomes necessary.