



ULTRA PERMALASTIC

Hot-Poured Rubberized Bitumen Horizontal Joint / Crack Sealing Compound

Admixtures

Surface Treatments

Protective Coatings

Concrete Repairs

Industrial Flooring

Grouts & Anchors,

Adhesives,

Water Proofing

Sealants

An effective and economical Joint Sealant for Trafficked pavement, water retaining structures, floor and roof Joints of buildings & Air Port Runways.

INTRODUCTION

Treatment of joints in concrete/Asphalt pavements plays an important part in the ultimate life of the roads. If the joints are not allowed to open and closed with temperature variation the road will crack with disastrous results and costly crack repairing materials shall be required.

PRODUCT DESCRIPTION

Ultra Permalastic is bitumen based hot poured joint sealing compound specially blended with rubber to give it elastomeric properties. It is single component/Hot Applied joint sealing/Crack filling compound having elastically modified composition with rubber and other additives without solvent.

Standards:

- ASTM D 1190 - 97
- ASTM D 3405
- ASTM D 6690 Type 1
- AASHTO M 173
- AASHTO M 324
- Federal Specification
- SS-S-164
- Corps of engineers. CRDC 530

APPLICATIONS:

- Pavements including those subjected to heavy vehicular traffic.

- Highways, Concrete / Asphalt streets etc.
- Crack sealing of Asphalt/ concrete roads.
- Water retaining structures.
- Water excluding structures floor & roof joints.

LIMITATION FOR USE:

1. Cannot be used on vertical or inclined surfaces.
2. Joints subjected to petrol or oil spillages, such as airfield hard standings garages etc.
3. When Surface temperature below 5c.

TECHNICAL SPECIFICATION

Cone Penetration@ (25n°C)	ASTM D5329	25-35 dmm
Flow @ (60°C)	ASTM D5329	30mm Max.
Resilience@ (25°C)	ASTM D5329	50% Min.
Softening Point Min.	ASTM D36	90 °C
Viscosity (@ 200°)	Brook Field	80 Poise Max.
Recommended Application temperature	ASTM D5167	160°C-188°C
Maximum Heating Temperature	ASTM D6690	200°C

SITE INSTRUCTIONS:

Joint Preparation

Permalastic shall perform only if the joints are prepared in proper manner taking all the precautions necessary in this regard. Joints in newly laid concrete where no sealing compound has previously been used must be dry and free from cement, laitance, or other foreign matter. A rounded wire brush or compressed air is recommended

to clean the joints. The fibrous joints filler such as flexi fill should be of the same thickness as the width of the join so that no voids are left and the sealing compounds are adequately supported.

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OLD JOINTS:

Old concrete surface with joints having been filled with other sealing compound must be scoured thoroughly with wire brush to get a perfectly clean surface. This is very important in case the previously used sealing compound is bitumen or other non-compatible base, otherwise Permalastic will not adhere properly and the quality of the work will suffer.

Crack sealing

For Crack sealing of Asphalt/ Concrete pavement, The cracks should be properly cleaned with wire brush to make it free from sand , dust etc. It is necessary to pour the hot applied sealant into thin cracks within the limits of application temperature. Below the recommended application temperature it may not seal the crack deeply. It is recommended to heat the Ultra Permalastic in a hot oil melter equipped with thermometer to monitor the temperature of sealant at the time of application.



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JOINT PRIMMING

Dry and properly prepared joint cavities must be primed with narrow width paint brush or by spraying. Perma Primer must be used.

HEATING OF PERMALASTIC

Special precautions are required to heat Permalastic. Direct or incorrect heating shall burn the rubber contents and render the material useless.

The material should not be heated over the prescribed temperature (160-188°C) and proper heating kettles with thermometer to ensure the correct pouring temperatures are essential for Permalastic work.

Permalastic should be cut in to small pieces using heated shovel blade and put in to the heating kettle. jacketed kettle is best for heating of Permalastic. If this is not available, a kettle fitted with electric or hand stirrer can be used. Small amount like 10 Kg of material is heated on slow fire and constantly stirred till a homogeneous mix is obtained. More pieces of the sealing compounds are gradually added while stirring the material continuously. The heated material is drawn from the kettle for pouring at the temperature 160-188°C

Exceeding the pouring temperatures should not be allowed as this shall burn the Rubber in the compound and impair its flexibility.

Heated material must be poured in to the joints within 2 hours. In cold frosty weather the joints may be preheated with gas torch.

To maintain the pouring temperatures in cold weather the pouring vessel may be fitted with heated equipment.

Re-melting of Permalastic, which has been heated and cooled, is not advisable and such material should be discarded.

Material heated and kept at the pouring temperatures may be used without any disadvantage.

Surface temperature of pavement should not below 5°C.

PACKING

Ultra Permalastic is available in 25 kg metal drum.

PRECAUTIONS

Temperature fluctuation, improper surface preparation may affect the performance of Ultra Permalastic. So it is advised to take all application steps as per recommendations.

WARRANTY: The Ultra Chemicals LLC. ("Ultra") solely and expressly warrants that its products shall be free from defects in materials and workmanship for 12 months from the date of purchase. Unless authorized in writing by an officer of Ultra, no other representations or statements made by Ultra or its representatives, in writing or orally, shall alter this warranty. ULTRA MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Ultra product fails to conform to this warranty, Ultra will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Ultra does not authorize anyone on its behalf to make any written or oral statements which in any way alter Ultra's installation information or instructions in its product literature or on its packaging labels. Any installation of Ultra products which fails to conform to such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Ultra's products for the Buyer's intended purposes.

ISO Certification:

Our production facility at Pakistan is ISO 9001:2008 ISO 14001:2004 by BUREAU VERITAS And UKAS Management

Regional Sales Office



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