

HS PU ELASTOSEAL NON-UV 2K



2K Liquid Applied Polyurethane Waterproofing Membrane

SCIENTIFIC WATERPROOFING SOLUTIONS

Description

HS PU Elastoseal Non-UV 2K is a two component, elastic, cold applied polyurethane liquid membrane system for waterproofing and protection.

Approval / Standards

Conforms to ASTM C-836 and ASTM C-898.

Product Information

Form, Color, Composition	Black / Grey polyurethane liquid.
Handling & Storage	Store in a cool dry clean place, at 4°C - 27°C in original sealed container.
Packaging	Available in 26 kg unit pack comprising 25 kg Component A and 1 kg Component B.
Shelf Life	9 Months from the date of manufacture when maintain in protected storage in original unopened sealed condition at 5 - 38°C.
Handling Precautions	As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

Physical Characteristics

Application	Brush / Roller / Airless Spray	Mixing Ratio (A : B), weight	96.2 : 3.80
Tack free time, hrs.	2 - 3	Recoat time, hrs.	6 - 8
Solid content, % by weight	90 ± 2	Pot life, minutes	60 ± 10
Resistance to water Pressure, 1 meter water column, 24 hours	No leak	Theoretical Coverage *, kg / m ² / mm (in 2 coats)	1.30 - 1.35
Service temp, range, °C Intermittent Continuous	Upto +150 - 40 to +100	Trafficable time, hours	24 - 36

*This coverage is based on application by roller onto a smooth surface in optimum conditions. Factors like surface porosity, temperature and application method can alter consumption.

Technical Characteristics @ 27 °C, 55% RH

Elongation, %, 14 days	ASTM D 412	400 ± 50
Hardness, Shore A, 14 days	ASTM D 2240	40 ± 50
Water Absorption, (%)	ASTM D 471	≤ 0.5
Adhesion to primed concrete, Pull-off strength, MPa	ASTM D 4541	2.0 ± 0.50
Tensile strength, MPa, 14 days	ASTM D 412	2.2 ± 0.50
Tear Strength, MPa, 14 days	ASTM D 624	25-30

Application Areas

- Roof / Terraces / Podium
- Terrace garden

Advantages

- High Crack Bridging.
- Monolithic and Seamless Membrane.
- Excellent adhesion to concrete.
- Resistant to Root Growth.

- Resistant to water, frost, mild acid and alkali.
- Easy Application and User Friendly.

Application Methodology

➤ Surface Preparation

- Remove all loose gravel, dirt, oil, grease and foreign matter by jet of dry air and clean the surface mechanically or by grinding to make it smooth before application.
- Repair all cracks by cutting "V" groove and fill with PMC mortar prepared in the ratio of HS Advanced Latex Plus : Water : Cement : Sand (1 : 1 : 5 : 20).
- Correct honeycomb / other minor surface defects with PMC mortar using **HS Advanced Latex Plus** as the bond coat.
- Ensure provision of slope in the gradient of 1:100 towards drain by laying PCC admixed with integral waterproofing compound, **HS Power Plasticizer** @ 200 ml / bag of cement preferably with galvanized chicken wire mesh.
- Provide fillet 75 mm x 75 mm coving made out of PMC mortar as above, using **HS Advanced Latex Plus** as bond coat.
- Ensure that the moisture content in the prepared surface does not exceed 5% immediately before application of **HS PU Elastoseal Non-UV 2K**.

➤ Material Preparation

- Skin formation may happen on the top of material during humid condition. In that event, cut skin from the periphery of the container and remove it.
- Stir both components of **HS PU Elastoseal Non-UV 2K** by a slow speed mixture fitted (100 rpm max) with a suitable mixing paddle to ensure a homogenous mix.
- After stirring, wait for the product to settle in order to let entrapped air escape.
- Use the entire material within 4 hours of opening the container.

➤ Waterproofing Application

- Prime the surface with **HS PU PU Elastoseal Primer** @ 8 - 10 m² / L.
- Allow the primer to touch dry condition.
- Apply 1st coat of **HS PU Elastoseal Non-UV 2K** @ 650 gm / m² by brush / roller / airless spray while the primed surface is tacky. For faster and smoother application, apply with airless gun.
- Spread non-woven geo-textile or Glass Fiber Tissue of 45 GSM with overlaps of 50 mm in both directions when the surface is still tacky; this is optional, to be assessed as per site requirements to achieve higher mechanical properties.
- Allow 1st coat to dry for 10 - 12 hr.
- Apply 2nd coat of **HS PU Elastoseal Non-UV 2K** @ 650 gm / m² by brush / roller / airless spray.
- Ensure final curing time of 36 hrs before allowing / carrying out any further work.
- Extend waterproofing treatment up to 200 mm and terminate into groove on the parapet wall. Fill the groove with PMC mortar.
- In case of vertical application, protect the applied liquid membrane
By sprinkling sand @ 200 gm / m² over the final coating when the surface is still tacky to facilitate plastering, and 25 mm plaster admixed with **HS Power Plasticizer** @ 200 ml / bag of cement.
- In case of horizontal surface, protect the applied liquid membrane
Spread separation layer of 200 GSM geo-textile, with overlap of 50 mm in both directions on fully cured waterproofed surface before laying protection screed, and then lay 50 mm plaster admixed with **HS Power Plasticizer** @ 200 ml / bag of cement.

- In case plastering is desired, sprinkle sand @ 200 gm / m² over the final **vertical** coating when the surface is still tacky to facilitate screeding.
- Conduct ponding test after 7 days of curing at ambient temperature.

➤ **Precautions**

- Do not allow any movement over waterproofed area unless ponding is done and waterproofed area is protected as below.
- Do not open the containers until ready to use.
- It should be noted that **HS PU Elastoseal Non-UV 2K** is aromatic polyurethane; therefore, as with all aromatics, over a period of time, colour change will occur if exposed to UV rays. This will not cause any negative effect on the physical properties of the product.

Value base of product data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

Health and Safety information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent **Material Safety Data Sheet**.

- This product contains Isocyanate. Avoid contact with eyes and skin.
- Wear suitable protective clothing such as overalls, goggles, dust mask and gloves. Ensure that there is adequate ventilation in the area where the product is being applied.
- Do not breathe in vapour or spray mist.
- This product is flammable.
- Keep away from sources of ignition.
- In case of fire, blanket flames with foam, carbon dioxide or dry chemicals.
- Eye protection during application is recommended.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- In case of skin contact, wash with soap and plenty of water. Get medical attention if irritation develops or persists.

Cleaning & Maintenance

Clean all tools immediately after use with Thinner. Do not allow the material to harden.

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DISCLAIMER

The information contained within this Data Sheet is based on information believed to be reliable at the time of its preparation. The Company will not be liable for loss or damage howsoever caused including liability for negligence, which may be suffered by the user of the data contained herein. It is the users' responsibility to conduct all necessary tests to confirm the suitability of any product or system for their intended use. No guarantee of results is implied since conditions of use are beyond our control.

BERGER PAINTS INDIA LIMITED

Berger House. 129, Park Street, Kolkata : 700 017

Phone : 91-33-2229-9724-28 / 6005-06, Fax : 91-33-2227-7288, 2249-9009/9729

e-mail : consumerfeedback@bergerindia.com ; Website : www.bergerpaints.com