

# TECHNICAL DATA SHEET

## TRIROOF HYBRID POLYMER HPX

### PRODUCT IDENTIFIER

<b>Product Name:</b>	<b>TriRoof Hybrid Polymer HPX 1274946 Rev.2</b>
<b>Revision Date:</b>	<b>23-SEP-2025</b>

### Description

TriRoof Hybrid Polymer HP, one component, UV resistant, bitumen, solvent and isocyanate-free, hybrid polymer based, elastic waterproofing material. It forms a waterproofing membrane that can dry out on the surface it is applied to and can install additional fracture bridges.

### Product Features

- UV resistant
- Environment friendly. Does not contain bitumen, isocyanate and solvent.
- To be applied on dry and damp surfaces without lining
- Can be used on indoor and outdoor surfaces, horizontal and vertical surfaces
- Easy to apply (brush, short hair roll, airless gun, notched trowel)
- Excellent adhesion
- Building a bridge of cracks
- High elasticity
- Paintable
- Water vapor permeability
- Excellent resistance to weather conditions (temperature, water and freezing)

### Application Areas

- Concrete, ceramic, tile, wood, glass, polycarbonate, GRP, metal, stone, marble, tile, brick, betopan, gas concrete, all kinds of vertical and horizontal surface,
- In the waterproofing and repair of chimney joints, wall floor anchor points, water drainage, roof lights, rain gutters
- Balcony, terrace, roof and roof streams
- Drinking water tanks and pools
- Repair of joints of bitumen and slate membranes
- All types of ceramics, bathrooms, kitchens and other wet areas
- Waterproofing on thermal insulation applications (PU foam, EPS, XPS etc.)

### Surface Preparation

- The surface and ambient temperature should be at least 5 ° C and maximum 35 ° C.
- The application surface should be clean and the elements that prevent adhesion (oil, dirt, dust, grease, paint, rust) should be cleaned from the surface.
- The surface must be strong and of sufficient strength. Cement grout, uncoated concrete and plasters should be removed from the surface.

# TECHNICAL DATA SHEET

- If necessary, the concrete surface must be roughened mechanically.
- Any cracks, fractures, gaps and segregations on the surface should be repaired with suitable sealant, epoxy or cement based repair mortars.
- Dilatations on the surface should be insulated with the appropriate polyurethane based filler material and dilatation tape.
- Corner chamfers can be supported with appropriate repair mortar or chamfer tape.
- As a result of these processes, dust and debris on the surface should be removed from the surface for the last time.

## Primer Application

- Can be applied to dry and moist surface without primer.
- Dusting surfaces should be primed with TriRoof MultiFlex (FLEX) Primer
- To obtain a homogeneous primer mixture, the primer should be mixed with an electric mixer for 3-4 minutes, low speed (~ 300 - 400 rpm) or with suitable equipment. Do not mix at high speed for a long time to prevent air bubbles.
- The prepared primer mixture is applied to the surface by brush, roller or airless spraying machines.
- Consumption in single coat application is 200- 400 g / m<sup>2</sup>. Consumption may vary depends on surface permeability, weather conditions and technique of application
- Second coat application can be made when necessary.

## Membrane Application

- TriRoof Hybrid Polymer HPX is ready for use. Do not add water or any solvent to dilute.
- The product in the special aluminum package is mixed before use, then the package is cut from the corner with scissors and poured onto the application surface and applied to the surface with brush, short hair roll or notched trowel.
- Application is made in 2 layers. It is recommended to apply the floors in such a way that the application directions are perpendicular to each other.
- Consumption is 1.50 kg / m<sup>2</sup> (1 mm) per layer.
- It is recommended to reinforce large surfaces or areas with a risk of cracking above 25-30 m<sup>2</sup> with geotextile after the application of the first layer. Second layer application is made on geotextile fabric.
- Waiting time between coats varies between 12-24 hours depending on temperature and humidity.
- Masking tape is used to ensure that the end points of the application surface are flat. The masking tape should be removed after 10 min.
- In order to make the surface rough in application to be coated on the ceramic, before application of the top layer membrane, the surface is sprinkled with an average of 1,00 - 1,50 kg / m<sup>2</sup> quartz sand.

# TECHNICAL DATA SHEET

## TECHNICAL SPECIFICATIONS

TEST NAME	RESULT	TEST METHOD
Chemical Structure	Hybrid Polymer	
Density	1,44 gr/ml (23°C ve % 50 R.H.)	(ASTM D1875)
Appearance/Color	Viskos liquid, Grey or White	
Viscosity	10000-20000 cps	Brookfield DV-E RV 23°C No 05
Curing Speed	3,00 mm/day (23 °C ve % 50 R.H.)	
Hardness (Shore A)	30±5	(ISO 868)
Elongation	≥%300	(DIN 53504)
Tensile Strength	1-1,5 MPa	(DIN 53504)
Tech Free Time	~ 1 hour (23 °C ve % 50 R.H.)	
Drying time between first and second layer (hours)	8-12 (23 °C ve % 50 R.H.)	
Shore A Hardness	30±5	(ISO 868)
Full Curing Time	~ 7 days	
Capillary water absorption and water permeability	0,01 kg/m <sup>2</sup> .h0,5	(EN 1062-3)
Adhesion strength through the pull-out test	> 0,8 N/mm <sup>2</sup>	(EN 1542)
Abrasion Resistance	~ 1105 mg	TS 8103 EN ISO 5470-1
Service Temperature	Between -20 °C - +80 °C	

## CHEMICAL STRUCTURE TABLE

CHEMICAL NAME	RESISTANCE
Hydrochloric Acid %10	-
Sulfuric Acid %10	±
Sulfuric Acid %25	±
Sulfuric Acid %50	-
Nitric Acid %10	±
Acetic Acid %5	-
Phosphoric Acid %10	-
Citric Acid %10	-
Formic Acid %1	-
Ethanol	-
Ethyl Acetate	-
Trichlorethylene	±
Toluene	-
Potassium Hydroxide %20	+
Potassium Chlorite %25	+
Ammonia %25	+
Hydrogen Peroxide %3	+
Sodium Chloride %25	+
Iron Sulfate %5	±
Diesel	+
Unleaded Gasoline, 98 octane	±
Engine oil	+

# TECHNICAL DATA SHEET

+ Resistant

± Resistant (color, brightness and hardness may change.) Rarely in case of contact or splash

– Not Resistant

## Packaging

2 pieces of 7 kg aluminium package in plastic bucket

## Color Varieties

White and grey (other colors can be produced for tonnage orders)

## Shelf Life & Storage Conditions

- It is suitable for 9 months from the date of production when stored correctly between +5 ° C and +30 ° C in original, unopened and undamaged packages.
- Products should be stored in dry and places where not having direct sunlight.

## Warning & Suggestions

- Personal protective equipment must be used during application. In case of contact with skin, wash with plenty of water. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Keep products away from sources of ignition. Do not heat the products by sun or other means. Do not smoke at the time of application.
- The product is ready for use. Do not add water or any solvent to dilute.
- The opened buckets should be consumed in a short
- The finished product should be protected against rain and mechanical stress until it is dry.
- Clean all tools and application equipment with thinner immediately after use. Hardened / cured material can only be cleaned by mechanical methods.

# TECHNICAL DATA SHEET

## DISCLAIMER

The information contained in this document (which is to be intended only for explanatory purposes) is correct and accurate and is based on our technical and scientific knowledge and on literature at the date of publication. Such information relates only to use of the products in the pure state and for the purposes stated herein. Nothing in the information contained in this document shall be deemed to be a warranty or a representation (explicit or implicit) by the manufacturer, and/or taken or construed as infringing of any existing patents. The manufacturer shall not be under any liability or responsibility for any of the information provided under this document or for any errors, omissions or misstatements, even with regard to results to be obtained through the use of the aforesaid information.

This information is provided in good faith and every reasonable effort is made to ensure that it is accurate and up-to-date. Tricel Composites (GB) Ltd. shall not be liable for any damage arising, directly or indirectly, from the use of the information contained herein. It is issued on the condition that the user will determine the safety and suitability of this product for their purposes before use. Regulations are country-specific and local information should be sought before placing your product on the market.

### Tricel Composites (GB) Limited

Unit A, Foxway,  
Off Atkinson Street,  
Leeds, West Yorkshire,  
LS10 1PS.

**Tel:** +44 (0)113 270 3133

**Email:** [sales@tricelcomposites.co.uk](mailto:sales@tricelcomposites.co.uk)

### Tricel Composites (NI) Limited

Unit 4, Milltown Ind. Estate, Greenan Road.  
Warrenpoint, Newry  
Co. Down,  
BT34 3FN.

**Tel:** +44 (0)284 175 3738

**Email:** [sales@tricelcomposites.co.uk](mailto:sales@tricelcomposites.co.uk)