

Hychem PF19

Product Description

Hychem PF19 is a two-component high strength structural epoxy paste designed for structural adhesion and strengthening. It is a paste with high thixotropy and is commonly used with FRP, Crack Injection and Hychem EJT bandage system.

Features

- Compliant to 5100.8-2017 - Rehabilitation & strengthening of existing bridges
- Certified to AS/NZS 4020:2018 Testing of products for use in contact with drinking water.
- High strength, structural paste adhesive.
- High thixotropy for overhead applications
- 100% solvent free
- Non-toxic when fully cured
- Very low VOC
- Self priming adhesive
- White and black components producing a grey colour when mixed.

Technical Data

Test	Test Result	Method
Compressive Strength at 7 days cure	75.8 N/mm ²	BS EN ISO 527-2: 2012
Tensile Strength at 7 days cure	26.2 MPa	ISO 527-2: 2012
Adhesion Strength	3.43 N/mm ²	ASTM D4541: 2002
Slant Shear Bond Strength	33.2 N/mm ²	EN 12618-3: 2004
Static Emodulus	11500 N/mm ²	EN 13412 : 2006
Coefficient of Thermal Expansion (-30°C to 35°C)	28.6 µm/(mOC)	ASTM D696 : 2016
Glass Transition Temperature	74.2°C (7 days cure) 65.6°C (1 month cure)	ASTM D3418 : 2021

Mix Ratio	3:1 by volume and weight
Application Temperature	8°C - 35°C
Compressive Strength	75 MPa
Tensile Strength	28 MPa
Adhesion Strength	3 MPa
Colour - Mixed	Grey
Density	Approximately 2kg per Litre



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Surface Preparation

Prior to the application of Hychem PF19, the substrate must be thoroughly prepared.

- The concrete substrate must be firm, clean and dry with a compressive strength of 25MPa and a minimum surface tensile strength of 1.5 MPa.
- New concrete must be allowed to cure for a minimum of 28 days.
- Remove all surface laitance, contaminants, existing coatings, curing compounds and any weak or loose materials.
- Prepare the concrete surface by grinding, shot blasting, scarifying, ultra high pressure water jetting or scabbling to provide the appropriate concrete surface profile (CSP) for optimum mechanical keying.
- The extent of surface preparation required is dependent upon but not limited to the thickness of the coating system to be applied. It is highly recommended surface preparation is carried out in accordance with industry standards and publications such as NACE 02203 item No. 22420 or ICRI Technical guideline No. 03732.
- For preparation & application specific to the Hychem EJT bandage system, refer to Hychem EJT technical data sheet.

Mixing

Mix components A+B together for at least 3 minutes with a mixing spindle attached to a slow speed electric drill (max 300rpm) Until the product is smooth in consistency and a uniform grey colour. To ensure thorough mixing, Pour the mix into a clear container and stir again for approximately 1 minute at low speed.

Application

The substrate and product temperature should be at least 3°C above the dew point during the mixing, application and curing phase. Apply product to substrate with a putty knife or trowel and smooth to appropriate thickness.

Packaging

8kg Kit = Part A - 6kg + Part B - 2kg

approximate yield per kit = 4 Litres.

Shelf Life & Storage

12 months from date of manufacture, stored under shelter at 25°C in the original un-opened container.

Safety Precautions

Wear appropriate personal protection equipment. Gloves, eye protection, mask and overalls should be used during mixing and application.

Cleanup

Collect with absorbent material, clean up using acetone or other ketone solvent.

Warning

Wear appropriate personal protection equipment. Gloves, eye protection, mask and overalls should be used during mixing & application.



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Warranties and Disclaimers

Hychem warrants that this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product is dependent upon the proper use and application of the product by the applicator. Hychem has no role in the application of the finished polymer other than to manufacture and supply its components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of spray equipment and application of sol-gel materials. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by Hychem and executed under seal by a company officer.

Field Support

Field support where provided, does not constitute supervisory responsibility. Suggestions made by HYCHEM either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not HYCHEM are responsible for carrying out procedures appropriate to a specific application.

Customer Responsibility

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