HYCHEM Hyflex FC

Flexible, Fast Cure, Non-Pick, Chemical Resistant Polyurethane Sealant

Product Description

HYCHEM Hyflex FC is a flexible, fast cure, non-pick, chemical resistant polyurethane sealant with good chemical resistance. The product is primarily designed for use as expansion and control joints on a variety of trafficable surfaces including stairs, roads, runways and pavements. The excellent wear resistance of Hyflex FC when cured enables the design of a tough, flexible seal and bond capable of cyclic, expansion and compression movement. Hyflex FC also has excellent resistance to degradation by rain, snow, pollution, sunlight, ultra-violet radiation and atmospheric contamination.

Typical Applications

- Motor workshops
- Service stations
- Sealing construction and expansion joints
- Prison cells that require pick resistance in areas
- Schools
- Food and beverage
- Aircraft hangars
- Trafficable areas including roads, pavements and stairs
- Stock and plant rooms

Features & Benefits

- Flexible, fast cure sealant
- Non-pick — suitable for areas requiring pick resistance
- Good chemical resistance
- Excellent wear resistance when cured
- Tough, flexible seal and bond capable of cyclic, expansion and compression movement
- Excellent resistance to degradation by rain, snow, pollution, sunlight, ultra-violet radiation and atmospheric contamination
- Adheres without a primer to standard concrete or mortar and bare aluminium
- Single component — no mixing required

Approvals / Certifications

- ASTM C920
- AS/NZS 4020:2018 Potable water

Technical Data

Composition	Polyurethane (single component)
Cure Method	Moisture curing
VOC Content	78 g/L

Physical Properties

Viscosity	Non-sag smooth thixotropic paste
Elongation at Break	> 450 %

APPLICATION GUIDELINES

Surface Preparation

Prior to the application of HYCHEM Hyflex FC, the substrate must be thoroughly prepared.

- All surfaces must be clean, dry and free from any contaminants such as laitance, oil, dust, grease, water or old sealants.
- Hyflex FC adheres without the use of a primer to standard concrete or mortar and bare aluminium. It is recommended to always conduct a pre-test adhesion to the substrate prior to application.
- For optimum results in adhesion of critical areas and high performance applications such as high-stress joints, surfaces of high porosity or extreme weather exposure, the use of a substrate primer is required.
- Hyflex FC is not recommended for applications less than 5mm in width or less than 6mm in depth.

Mixing

Single component — no mixing required.

Application

Apply Hychem Hyflex FC in a continuous operation using enough pressure to leave a smooth, consistent surface and ensure maximum contact with the interface of the joint.

1. Clip the end of the sausage and place in the barrel gun.
2. Screw the cap and nozzle onto the barrel gun.
3. Use the trigger to extrude the sealant.

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Application Information

Mix Ratio	1 component — no mixing required
Application Temperature	5 °C to 35 °C
Skim Time	Approx. 45 minutes
Cure Rate	2.5 – 3 mm per 24 hours
Full Cure	7 days
Packaging — 600ml sausage	1 component, pre-filled
Coverage — 5mm x 6mm joint	20 lineal metres per 600ml sausage
Coverage — 20mm x 10mm joint	3 lineal metres per 600ml sausage
Clean Up	Clean off any un-cured material and equipment immediately after use. Cured material can be removed by mechanical means only.

Environmental Conditions

Temperature and the surrounding atmospheric conditions will play a part in the curing process of all resin products. Under conditions of low temperatures and high humidity the final cured surface finish can be adversely affected, potentially resulting in poor gloss retention, discoloration over time, poor overcoat ability and inter-coat adhesion. Quite often these conditions will result in the formation of a white film over the surface, often evident after contact with water. If this occurs, the existing coating will need to be abraded to completely remove the affected surface to ensure the adhesion of subsequent applications. In some cases, partial or complete re-priming may be necessary. Attention also needs to be paid to the substrate temperature, which should be at least 3-5 °C above the dew point during the curing phase. Industry standards recommend the accurate recording of environmental conditions such as substrate and air temperatures, humidity levels and dew point readings during both the application and curing processes. Full material warranties cannot be provided unless all the relevant data has been recorded accurately. If in doubt consult the HYCHEM technical department for advice.

Safety Precautions

Wear gloves, eye protection and overalls during application. Ensure there is adequate ventilation. Avoid breathing dust, fume, gas, mist, vapours or spray. Wash hands, face and all exposed skin thoroughly after handling. Wear protective clothing, gloves, eye/face protection and a suitable respirator. In case of inadequate ventilation wear respiratory protection. See the SDS for further details.

Shelf Life

12 months from date of manufacture when stored under shelter at between 5°C and 30°C and in the original un-opened container.

Storage Conditions

The packaging must be stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between 5°C and 30°C.

Important Considerations

- Hyflex FC is not recommended for applications less than 5mm in width or less than 6mm in depth.
- Always conduct a pre-test adhesion to the substrate prior to application.
- For high-stress joints, surfaces of high porosity or extreme weather exposure, a substrate primer is required.
- The estimated lineal metre yield does not allow for waste or irregular joint geometry.
- Cured material can be removed by mechanical means only, so clean equipment immediately after use.

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 the application tools, including trowelling, spray equipment etc. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by HYCHEM.

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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

The technical information and application advice given in this publication is based on the best information available at the time of print. As the information herein is of a general nature, no assumption can be made as to the product suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

Legal Notes

The information, and in particular the recommendations relating to the application and end-use of HYCHEM products, are given in good faith based on HYCHEM's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with HYCHEM's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. HYCHEM reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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