HYCHEM Hyflex NS

Fast curing sealant

Product Description

Hyflex NS is a fast curing sealant with good chemical resistance for use where conventional 1 component sealants fail to perform. The product is primarily designed for use as expansion and control joints on factory floors where the demands of traffic prevent the use of weaker sealants. The excellent wear resistance of Hyflex NS sealant enables the design of flush joints, thereby preventing joint edge damage from impacting trolleys. Also, Hyflex NS has excellent resistance to degradation by chlorine, making it a suitable choice for use in swimming pools. Its use as a jointing product for bunded areas in the chemical industry can also be considered.

Typical Applications

- Motor workshops
- Schools and institutions
- Food and beverage
- Aircraft hangars
- Back of house areas
- Stock and plant rooms

Technical Data

Joint movement	+/- 5%

Physical Properties

Elongation	80 %
Tensile Strength	10 MPa
Hardness Shore D	45

APPLICATION GUIDELINES

Application

At 23°C

Mix ratio by volume (Resin: Hardener)	1:1
Pot life	45 minutes
Full cure	7 days

Epoxy pigment paste can be added for colour. Add approximately 25 ml per litre Hyflex NS Neutral. Always mix pigment into the resin.

Surface Preparation

Joint edges need to be sound and free of loose friable material.

Damaged joints should be cut out and widened, the gap to be filled with an epoxy aggregate mortar. A new joint is then to be cut in the epoxy fill. The HYFLEX joint sealant is applied to the new cut joint. Concrete Joints in good repair need to be cleaned and primed with a suitable epoxy primer such as HYCHEM E100.

Mixing

- Mix with a jiffy mixer at a speed of 500 rpm to avoid incorporating excessive air into the mix.
- Mix for 1 minute, scrape down the sides of the mixing container and mix for another minute to ensure the mix is homogeneous.

Packaging

8 Litre 20 Litre To determine amount of product required measure the 3 dimensions of the joint (width, depth and length) in cm and multiply together. Then divide by 1000 and this gives the volume in litres.

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So, 1cm x 1cm x 100cm	= 100cm3
100/1000	= 0.1 litres or 100ml

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 appropriate personal protection equipment. Gloves, eye protection, mask and overalls should be used during mixing and application. Ensure there is adequate ventilation and avoid breathing the vapour. Refer to the Safety Data Sheet for this product before use.

Shelf Life

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

Chemical Resistance

Hyflex NS has good resistance to water and aqueous solutions such as dilute acids, salts and alkalies. Resistance to machine oils and fuels is fair. Hyflex NS is only suitable for short term exposure to solvents.

Acids	Alkalis	Oils	Mechanical Fluids
Hydrochloric 10%	Ammonium Hydroxide 20%	Crude	Skydrol
Nitric 10%	Sodium Hydroxide 20%	Mineral	Brake Fluid
Sulphuric 10%	Potassium Hydroxide 20%	Engine	Petrol
Phosphoric 10%	Bleach	Vegetable	Antifreeze

* These fluids should not be left in contact with Hyflex NS for more than 12 hours.

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.

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,

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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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