



HYCHEM
EPOXY SYSTEMS

E50 LV

HYCHEM E50 LV is a 2 component low viscosity epoxy injection resin, designed principally for the bonding, sealing and structural repair of cracked concrete, tanks, facings and supports. E50 LV consolidates concrete and inhibits liquid absorption and ingress increasing the longevity of the concrete.

FEATURES AND BENEFITS

- Structural refurbishment of cracked beams, columns & footings.
- Sealing of cracked roads, pavements, rooftops, ponds, dams & tanks.
- Crack sealing and bonding of plaster, brickwork, cement renders etc.

TYPICAL APPLICATIONS

HYCHEM E50 LV crack Injection resin may be applied in a number of ways, dependant upon the size, depth and location of the crack. Gravity feed is most often used for cracked roads, pavements & rooftops. Low pressure injection is the most common repair technique for simple structures such as walls, columns & beams. High pressure injection may be required for the repair of large structures such as dams & bridges.

Technical data	
1. Compressive Strength	90MPa
2. Viscosity (25°C)	100-150cps
3. Crack Size	<0.2mm
4. Chemical Resistance	Resistant to many chemicals, consult Hychem for further advice
3. Pot Life (25°C)	20 minutes
4. Mix Ratio - by volume	2:1 (Part A to Part B)

APPLICATION

Surface preparation on concrete

Prior to the application of E50 LV, the substrate must be thoroughly prepared.

- The concrete substrate must be firm, clean and dry with a minimum compressive strength of 25 MPa 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 that all surface preparation is carried out in accordance with industry standards and publications such as NACE O2203 item No. 22420 or ICRI Technical Guideline No. 03732.

Mixing

In a clean container, mix Part A and Part B together @ 2:1 ratio by volume using a helical mixer at a speed of 350 rpm. Mix until it becomes homogenous, approximately 1-2 minutes.

SAFETY PRECAUTIONS

Wear gloves, eye protection, masks and overalls during mixing and application.

PACKAGING

6 Litre

30 Litre

WARNING - ENVIRONMENTAL CONDITIONS

Temperature and the surrounding atmospheric conditions will play a part in the curing process of all epoxy products. Under conditions of low temperatures and high humidity the final cured surface finish can be adversely affected potentially resulting in poor gloss retention, discolouration over time, poor overcoatability and intercoat adhesion. Quite often these conditions will result in the formation of a white film over the surface often evident after contact with water. This chemical reaction with the atmosphere is commonly referred to as "amine bloom" or "amine blush".

If this occurs then 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°C and preferably 5°C above the dew point during the curing phase.

Industry standards recommend the accurate recording of times and dates, batch numbers, consumption rates and environmental conditions including 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.

NOTE: Customer responsibility

The technical information and application advice given here 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 products 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.

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.

If unsure contact Hychem for further technical advice before proceeding.