

VAL® SEAL 940 NPC

Product Description

VAL seal 940 NPC is two component sealants based on Polysulphide liquid elastomer. It consists of two compounds base and accelerator (Curing agent). When these two components are mixed a chemical reaction is initiated which cures instantly to a firm, flexible rubber like seal with excellent adhesion to concrete, masonry, wood, glass, acrylic, and PVC plastics. It is a non-sag material used for sealing of horizontal, vertical & ceiling joints.

Characteristics / Advantages

- Self-leveling, pouring in horizontal joint levels itself
- Recovers the original width after expansion & contraction without losing the surface bond
- Excellent ability of repaired
- It can be coated by waterproofing compounds
- Non-toxic
- Sealant will not cause stains to concrete masonry or stones
- Cures at ambient temperatures to a tough, elastic and flexible rubber like material
- Bonds strongly to most of the building materials with the use of primers
- Durable, remains unaffected by UV rays, ozone and weathering conditions
- Resistant to water, salt water, 10% dil. acids except nitric acids, alkalis, most of the common chemicals, vegetable, lubricating oils and fuels
- Performs well in a temperature ranging from -20°C to 80°C
- Within the following parameters, movement capacity provides sufficient hermetic sealing of the joint exposed to expansion, contraction, vibration, and cyclic movement. Up to 25% of the breadth of the movement joints

Technical Parameters

Nature	Two Component
Mixing Ratio	Base = 92 : Accelerator = 8 parts by wt.
Consistency after mixing, VAL seal 940 NPC	:Thick, non-sag paste
Application time (pot life) at 30°C	2 -3 Hours
Initial setting time at 30°C	24 Hours
Complete curing time	At 5°C : 8 weeks At 15°C : 4 weeks At 25°C : 2 weeks At 30°C to 35°C : 1 week
Color-Base compound	Off white
Accelerator (Curing Compound)	Dark brown to Black
Mix Compound	Grey
Sump (sag) resistance	No Sagging
Halides	Free

*Values can vary site to site as per the conditions

How it Works?

In construction various types of joints are designed such as Butt joints, Lap joints, Fillets Joints, Expansion joints, Control joints and Glazing joints. Hence, it is vital that the proper width-to-depth ratio is specified so that the width of the joint is consistent with the capability of the sealant to endure daily and seasonal cycles for prolonged periods. To achieve the long-term, effective performance the established width-to-depth ratios are determined and are given below: -

Joint Width	Depth of sealant in joint	
	Concrete&Masonry	Metal & Glass
¼" to ½" (6.4mm to 12.5mm)	¼" minimum (6.4mm)	¼" minimum (6.4 mm)
½" to 1" (12.5mm to 25.4mm)	Width / 2	Width / 2
Over 1" (25.4mm to 30mm)	Width/2	Width/2

- The joint surface must be dry, free from dust, coatings, bituminous mastics, concrete curing agents, mold release agents, oils, greases, and loose particles.
- Clean the joint surface by wire brush and sanding with emery paper.
- Remove dust by compressed air or paint brush.
- Wipe out oil and grease by solvent-soaked cloth.
- Insert compressible polyethylene, polyurethane, neoprene, polyethylene butyl rod as backup material to control depth and as support of sealant in the joint.
- Apply a primer to the surface as per your application.
- Fix bond breaker tape such as self-adhesive polyethylene tape on back-up material to avoid adhesion of sealant to the third surface.
- Mix the Base compound with the accelerator manually with spatula, palette knife or special flat stirrer attached to a low-speed electric mixer less than 500 r.p.m.
- Apply the mixed Gun grade compound by means of a spatula or caulking gun into the joint.

Storage

Store away from frost and heat in a dry area. It is sensitive to moisture and temperature. Reseal when partly used, by covering with nitrogen.
Storage temperature is between 10°C and 30°C. Shelf Life – 9 months for unopened container.

Safety

Avoid breathing dust/fume/gas/mist/vapors/spray. If required, wear respiratory protection. Always wear protective gloves/clothing and eye/face protection.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if on skin or hair: Remove all contaminated clothing immediately. Rinse skin with water or take shower.

Legal Notes

All data in our product information are based on our current knowledge and experience. They do not release users from careful testing of the application and strict observation of the relevant processing regulations because of the wide range of possible influences during the application and use of our products. Legally valid assurances of specific characteristics or suitability for special purposes of application other than those provided in our documentation for the specific product cannot be inferred from our information. The recipient or processor of our products at their own responsibility must follow any protective rights or existing laws and provisions. Moreover, our general terms and conditions of sale and warranty are valid.