

# TIKI POLYSEAL



Since 1964

## Two-Part Poly Sulphide Sealant – Pourable Grade

### DESCRIPTION

**TIKI POLYSEAL** is two components pouring grade elastomeric sealant based on Polysulphide liquid elastomer. It consists of a 'base' compound and accelerator (curing agent). When two components are mixed together, a chemical reaction is initiated which cures instant to a firm, flexible rubber like seal with excellent adhesion to concrete, masonry, wood, glass, acrylic and PVC plastics. It is capable of withstanding repeated extension, compression & cyclic movements in horizontal joints without loss of adhesion and resists deterioration by weathering, sunlight, ozone, water, salt, oils, and fuels. It is far superior to all the conventional joint sealant material like bitumen, mastics, metallic channels, and expansion sheets.

### USES

- Sealing of horizontal expansion, contraction & construction joints in structure such as, concrete pavement, highways, runways, airfields, warehouses, industrial floors, cargo areas etc.
- Sealing horizontal joints in areas, which are affected by fuel, oil, fire etc., such as oil terminals, garages, petrol pumps, aircraft fueling areas, etc.
- Sealing horizontal joints of water retaining structure such as, water tank, reservoir, aqua ducts, canals, culverts, and water treatment plant.

### ADVANTAGES

- Cures at ambient temperatures to a tough, elastic, and flexible rubber like material.
- Bonds strongly to most of the building material with the use of recommended primer.
- Durable, remains unaffected by UV rays, ozone, and weathering conditions.
- Resist to water, salt water, 10% dilute acids except nitric acids, alkalis, most of the common chemicals, vegetable oils, lubricants, oils and fuels.
- It performs well in a temperature range from – 40°C to 80°C intermittent.
- Movement capability – Provides satisfactory hermetic sealing of the joint subjected to expansion, contraction, vibration, and cyclic movement within the following limits. - Movement joints up to + 25% of the width.
- Resilient - recovers the original width after expansion & contraction without the losing the surface bond.
- Non-Staining to concrete, masonry or stones.
- Fuel Resistance.
- Fire Resistance.

### STANDARD

**TIKI POLYSEAL** Complies to BS:5212:1990 Type N, F & FB.

### PROPERTIES

TECHNICAL DATA	VALUE
Nature	2 Component
Mixing Ratio (Part-A : Part B)	100:8
Consistency after Mixing	Flowable Paste
Pot Life @ 25°C	>2 Hours
Initial Setting Time @ 30°C	2 -3 Hours
Complete Curing Time @ 15°C	4 Weeks
@ 20°C	2 to 3 Weeks
@ 25°C	1 Weeks
@ 30°C	3 to 4 Days
At low temperatures, cure rate is slow	
Part-A Color – Base Compound	White / Off-White
Part-B Color – Curing Compound	Dark Brown to Black
Color - Mix Compound	Grey
Shore A Hardness	15 to 21
Movement Accommodation	
Butt joints (movement in tension and compression)	30%
Lap Joints (movement in shear)	50%
Recovery	>70%

### JOINT PREPARATION

The joint sealing slots in concrete should be accurately formed and must be dry, sound, clean and free from free from dust, coating, bituminous mastics, concrete curing agents, mould release agents, oils, greases, and loose particles.

Clean the joint by wire brush and sanding with emery paper.

Remove dust by oil free compressed air or paint brush.

Wipe out oil and grease by solvent soaked cloth (such as xylene, toluene, or acetone.)

### JOINT SIZE SUITABILITY

Joint Width (mm)	Single application - Min.6, Max.25 Multiple Application - 50mm
Joint Depth (mm)	Porous Substrate - Min.10, Max.25 Non-Porous Substrate - Min.6, Max.25
Width : Depth	Butt Joint - 2:1 Floor Joint - 1:1

### APPLICATION INSTRUCTIONS

Avoid application below 10°C temperatures.

Avoid application on damp or moist substrate

## MASKING TAPE

Apply masking tape such as self-adhesive polyethylene, cellophane or cloth tape on both edges of the joint. It is used to improve the neatness of the finished seal by protecting the face edges of the joint. It may be removed immediately after tooling of the sealant.

## PRIMING

Apply two coats of **TIKI PRIMER-PS** by brush on the sides of the joints surface at an interval of 30 minutes. Allow flash-off of solvent before application of **TIKI POLYSEAL**, i.e. primed surface should be touch-dry.

## BACK-UP MATERIAL

A suitable back-up material, such as cross-linked PE foam, strip/rod should be inserted in to joint to provide correct joint depth for **TIKI POLYSEAL**.

## BOND BREAKER

If the joint is not deep enough to accept back-up material or if the inserted back-up material surface is contaminated with primer, a bond breaker tape such as self-adhesive PE tape should be inserted into base of the joint or above the back-up material to avoid adhesion of sealant to the third surface.

## MIXING

The base and accelerator compounds supplied are packed in pre-weighed quantity as per the mixing ratio.

After the application of **TIKI PRIMER-PS** primer, mix the material of individual container. Transfer entire quantity of accelerator to the base compound tin and mix it thoroughly to a uniform, homogenous grey colour. Mixing can be done manually with spatula, palette knife or special flat stirrer attached to a low speed electric mixer

## POURING

After mixing the two components, the mix is suitable for pouring directly from the container into the joints. Pour the mixed material in to the joints. This pourable grade level itself to form a smooth and clean surface. The finished level of the seal should be recessed below the trafficked surface.

## FINISHING

It is desirable that a smooth surface is obtained. Tool the sealant by pressing the puffy knife or flat tool against the sealant surface, moving along the length of the joint. Tooling breaks air bubbles and exposes any air pockets present. Tooling compresses the sealant, thus promoting adhesion to the joint sides. After tooling the masking tape should be removed immediately. Soap solution can be used to smoothen the sealant surface

## COVERAGE

**TIKI POLYSEAL** Sealant: The number of running meter work done in 1 kg. of **TIKI POLYSEAL** sealant, can be calculated by following formula: -

$$L = 625 / (W \times D)$$

Where,

L = Length of the joint in linear running meter

W= Width of the joint in mm.

D = Depth of the joint in mm.

## GUIDE TO TIKI POLYSEAL COVERAGE

Joint Size, mm	Kg./R.Mtr.	R.Mtr./Kg.	R.Mtr./4Kg.
5x5	0.04	25	100
10x5	0.08	12.5	50
10x10	0.16	6.25	25
20x10	0.32	3.125	12.5
40x20	1.28	0.78	3.12

**TIKI PRIMER-PS** Primer: 1 litre. of **TIKI PRIMER-PS** is required per 15kgs. of **TIKI POLYSEAL** sealant.

## CLEAN-UP

Use Aromatic Solvents for cleaning equipment and tools immediately after applying **TIKI POLYSEAL**

## SUPPLY

**TIKI POLYSEAL** is supplied in pack sizes of 1K., 4Kg., & 6 Kg.

## STORAGE

**TIKI POLYSEAL** must be stored above 20°C. Store under the shed & protect from extremes of temperature. Keep container close when not in use.

## SHELF LIFE

Shelf life is 12 months when stored as above and in Original Sealed Container. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.

## SAFETY PRECAUTIONS

As with all chemical products, care should be taken during use and storage of **TIKI POLYSEAL** to avoid contact with eyes, mouth, skin, and foodstuffs until product is fully cured/dried

Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children, animals and direct sources of high temperatures, naked flame, and sparks. Reseal containers after use. Do not reuse containers for storage of consumable item

**Disclaimer:** **TIKI TAR INDUSTRIES** warrants that each of its products will be manufactured in accordance with the specifications in effect on the date of manufacture. While **TIKI TAR** endeavors to ensure that information given herein is correct to the best of our knowledge, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether in accordance with any advice, specification, recommendation of information given by it.

We recommend that adequate tests be performed by you to determine if this product meet all your requirements.

**Note:** Properties subject to change as per specific requirement.

## TIKI TAR INDUSTRIES (BARODA) LIMITED

Village Road, Bhandup (W), Mumbai-400 078, Maharashtra, India.

T: +91 22 4126 6666, 2566 7831 | F: +91 22 2566 7830

E: tiki@tikitar.com | W: www.tikitar.com



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