

Dr. Fixit PU Sealant



ONE PART NON-SAG POLYURETHANE SEALANT

Description

Dr. Fixit PU Sealant is a one-part moisture curing Polyurethane Sealant composed of polyurethane polymer, pigments, fillers & additives. It is used for filling and sealing joints in buildings & structures. It is highly elastic & resilient, weather-durable, non sagging, watertight with excellent adhesion to almost all building construction materials.

Specification

Meets the requirement of ASTM C-920-S, NS, 25 & BS EN ISO-11600: 2003 Type F & G, Class 25 LM standard.

Areas of Application

- Sealing of expansion and construction joints as well as joints between different construction materials in high-rise buildings, basements, floorings etc.
- Sealing joints in between precast concrete panels.
- Sealing Joints in between tiles, bricks, and marble etc.
- Sealing joints of metal container finishing.
- Repairing of non-moving concrete Cracks and control widths.
- Perimeter pointing & curtain wall ceiling.

Features & Benefits

- **Ready to use** - Single pack, Easy to apply and smooth
- **Curing** - Cures by absorption of moisture from air, (no external curing is required.) at ambient temperature with humidity.
- **Elasticity** - Elastic & forms a permanent tough rubber seal.
- **Adhesion** - Excellent adhesion to concrete, brick work, painted wood, glass, glazed surfaces, aluminum, stainless steel, steel & plastic like polyester & PVC. benefits variety of application & hermetic sealing.
- **Non Sag** - Sag/slump thixotropic, does not sag or flow down in the joint.
- **Staining** - No staining of cementitious substrates.
- **Weathering durability** - Excellent, may slightly yellow on long exposure to UV light.
- **Movement accommodation** - Accommodates continuous and pronounced cyclic movements. benefits from failure in joints.
- **Biodegradation** - Resistant to bio-degradation, maintains hygiene.

Joint Design

For various reasons, different types of joints are provided with width depth ratios in different proportions. Depending on the horizontal or vertical movements, the cured sealant should retain its original shape after the deformation of expansion/contraction. So width depth ratio is very important.

WIDTH: DEPTH RATIO

JOINT WIDTH (MM)	WIDTH /DEPTH RATIO
For 6 to 12 mm joint width	Depth shall be 1:1 (equal)
For 12 to 25 mm joint width	Depth shall be 2:1 (half)

Method of Application

1 SURFACE PREPARATION

- Joint edges should be sound and free from grease or oil contaminations. If spalled, it should be rectified properly by using polymer mortar or epoxy mortar.
- Use a closed cell polyethylene foam sheet or rod as a back up material. Back up material is used to adjust width to depth ratio and falling of sealant while application. Eg.: thermocol sheet can be used as a back up material.
- Fix a bond breaker tape over the backup material to prevent third surface adhesion.
- Fix a masking tape on both sides of joint surface to get neat & clean appearance of joints after application of sealant.

2 PRIMING

Prime only on two sides of the properly prepared joint surface with Dr. Fixit Pidiprime A by brush and allow it cure for minimum 20 minutes. Apply two coats of primer at an interval of 30 minutes. After priming is over, sealant should be filled after minimum 30 minutes and before 90 minutes. If 90 minutes is exceeded a fresh coat of primer should be applied.

3 APPLICATION

Dr.Fixit PU Sealant is available in 600 ml sausages. Insert the sausage in hand operated application gun. Apply nominal pressure over the trigger of the gun so that sealant starts extruding out of the nozzle & fill the sealant in joints. Apply slightly in excess for tooling & finishing purpose.

4 FINISHING

Tool the sealant immediately with tooling knife by pressing against the joint to remove air pockets & to ensure 100% contact and adhesion with the surface.

5 CLEANING

After sealing the joint the tools and equipments should be cleaned immediately with kerosene or any other cleaning solvents.

Precautions & Limitations

- Maximum width for application in a joint is 25 mm
- Do not expose the sealant to high temperatures
- Sealant will not adhere to substrates with contamination and traces of bitumen
- Adhesion of the sealant must only be on two opposite faces
- Do not carry out sealing operations during hot weather conditions.
- Use of shalitek board as a back up material should be avoided
- Application to be started only after 30 minutes of priming the substrate
- Product should be used within 24 hours of opening the sausage and should be closed properly after use.
- Do not apply at a temperature below 5°C



Technical information

CHARACTERISTICS

PROPERTIES	SPECIFICATION	RESULTS
Appearance		Homogeneous, highly viscous paste
Colour		Grey / White
Density (g/cc)		1.18 ± 0.02
Skinning time, minutes		15 - 20
Tack Free Time, Hrs	ASTM C - 920	72
Application temperature		5°C - 35°C
Service temperature range, C		- 30 to + 80
Slump at 35° angle		Nil
Hardness, Shore A	ASTM C - 920	20 - 25
Staining	ASTM C-920	No staining
Adhesion & Cohesion under cyclic movement, cm ²	ASTM C-920	less than 5
Movement Accommodation Factor		25 % for butt joints and 50 % for lap joints
Modulus at 100% elongation, N/mm ²	DIN 53504	0.2
Elongation at break, %	DIN 53504	> 400
UV resistance		Good

Packing

- Dr. Fixit PU sealant is available in 600 ml sausage
- Dr. Fixit pidiprime A - 500 ml

Coverage

[SEALANT]

$$L = \frac{\text{Vol of sealant in ml}}{W \text{ in mm} \times D \text{ in mm}}$$

(Wastage is not considered)

Where, L = Length of the joint in linear meter,
W = width of the joint in mm
D = depth of the joint in mm

PRIMER

6 to 8.5 % of the Sealant quantity (May vary depending upon the porosity of the substrate)

Shelf Life & Storage

Shelf life is 12 months from the date of manufacturing. The material should be stored in cool and dry place

Health & Safety Precautions

- Some people are sensitive to solvents, resins and hardeners and so it is advisable to use hand gloves and goggles.
- Avoid application on damp and moist substrates and at Temperature below 5°C.

Note

Field services where provided does not constitute supervisory responsibility. Suggestions made by company either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not company are responsible for carrying out procedures appropriate to a specification.

Other Products Categories available

Dr. Fixit brings you the widest range of Construction Chemicals



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