Dr. Fixit Pidiseal PS 43

FUEL RESISTANT TWO PART POLYSULPHIDE JOINT SEALANT

Description

Dr. Fixit Pidiseal PS 43 is a two component, pouring grade, elastomeric sealant which when mixed and applied cures by chemical reaction to form a tough and flexible rubber seal.

Typical Applications

- Concrete highways.
- Aircraft hangar and workshop Floors.
- Fuel stations.
- Car parks.
- Airport runways.
- General construction and expansion joints.

Features

- Self smoothing; suitable for horizontal joints.
- Aviation fuel resistant.
- Highly elastic.
- Excellent adhesion.
- Accommodates continuous and pronounced cyclic movement.
- Non shrink.
- UV resistant.
- Chemical resistant.

Standard Compliance

- British Standard BS5212.
- British Standard BS4254.
- ASTM D 412.

Packaging

4 Litre pack

Method of Application

1 SURFACE PREPARATION

- Joint surfaces must be sound thoroughly clean and dry and free from grease, oil and any other contamination. All dust and debris must be removed by wire brushing, grinding and vacuuming. Damaged joints should be repaired first using a suitable mortar from the Pidilite range.
- Ensure that the filler material such as closed cell polyethylene sheet or rod is tightly packed and no gaps or voids are evident at the base of the joint. Where backing rod is not fitted a bond breaker tape must be used.
- Fix masking tape on both sides of joint surface to provide a neat appearance.

2 PRIMING

- Prime, avoiding ponding at the base of the joint, with Dr. Fixit Pidiprime A by brush. Particularly porous surfaces should be primed twice. Apply the second coat of primer when the first is tack free but within 3 hours. Sealants should be applied as soon as the primer is touch dry and within 8 hours. If this time is exceeded a fresh coat of primer should be applied.

3 MIXING

- Add curing agent to resin and mix thoroughly with a slow speed electric mixer (300 – 450 rpm) for approx. 2-3 minutes until a homogenous and uniformly grey coloured material is obtained.

4 APPLICATION

- Dr. Fixit Pidiseal PS 43 is a self smoothing material, after mixing it can be poured directly from the container.

5 FINISHING

- Due to the liquid nature of the material it should require no finishing. Allow the material to cure for approximately 1 hour, as the viscosity increases due to curing the tape can be removed.

6 CLEANING

- After sealing the joint the tools and equipment should be cleaned immediately with cleaning solvents/thinners.

7 CURING

- Allow sealant to cure for 7 days before carrying out any testing. Protect the joints from water for at least 24 hours and chemicals for 7 days.

Note:

- Maximum joint width is 50 mm.
- Do not expose the sealant to high temperatures.
- Do not use in direct contact with materials containing pitch or bitumen.
- Over painting of sealants is not recommended, due to flexibility differential. If required however always carry out site trials to determine compatibility.

Technical Information

PROPERTIES	RESULTS		
Form	Two component sealing compound		
Colour	Grey		
Solids Content	100%		
Density	1.48 - 1.54 kg/ltr		
Physical/Chemical Change	Chemical cure		
Hardness Shore `A´ @ 25°C	16 - 24		
Movement Accommodation Factor	+/- 25%		
Application Temperature	5 - 50°C		
Pot Life @ 25°C	2 hours @ 25°C	1 hour @ 35°C	
Setting Time	36 hours @ 15°C	16 hours @ 25°C	12 hours @ 35°C
Cure Time	2 weeks @ 15°C	1 week @ 25°C	4 days @ 35°C
Water Immersion	This product must be fully cured before permanent immersion in water.		
VOC Content	Nil		

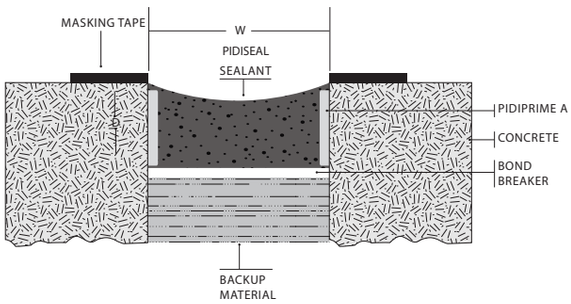
CURED CHARACTERISTICS

Hardness, Shore A	ASTM D 412	12 - 20
Tensile Strength at break, kg/cm^2	ASTM D 412	3 - 5
Elongation at break, (%)	ASTM D 412	500 - 600
Adhesion / Bond Strength, Kg/2.5 cm	BS 4254	3 - 4
Plastic deformation, %	BS 4254	15
Staining	BS 4254	No stain
Movement Accommodation Factor		25 % for butt joints and 50% for lap joints
Service Temperature Range		- 15°C to + 80°C

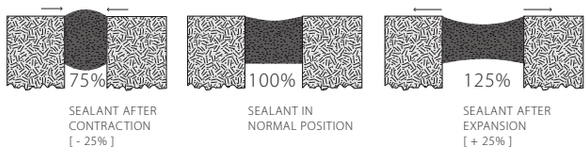
Joint Design Criteria

Dr. Fixit Pidiseal PS43 may be applied to joints between 5 mm and 50 mm wide. Different sized joints require different width/depth ratios. This is subject however to the overriding recommended minimum sealant depths of 10 mm for all porous surfaces and 20 mm for all trafficked joints and those subject to hydrostatic pressure.

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)
For 25 to 50 mm joint width	Depth shall be half or less than half



JOINT DESIGN - SEALANT APPLICATION



MOVEMENT ACCOMMODATION FACTOR (MAF)

To ensure the sealant remains within its stated movement capacity (25% MAF), joint widths should be designed in accordance with the recommendations of BS 6093.

The use of primer is always required on porous surfaces. On non-porous surfaces a primer is not normally required except where glass or glazed surfaces are to be permanently immersed in water.

Estimating

Joint Size in mm	Litres per Linear Metre	Linear Metre per 4 Litre Pack
5 x 5	0.025	160.00
5 x 10	0.050	80.00
10 x 5	0.050	80.00
10 x 10	0.100	40.00
20 x 10	0.200	20.00
20 x 15	0.300	13.33
20 x 20	0.400	10.00
40 x 20	0.800	5.00
40 x 25	1.000	4.00
40 x 30	1.200	3.33
40 x 40	1.600	2.50
50 x 25	1.250	3.20
50 x 30	1.500	2.66
50 x 40	2.000	2.00
50 x 50	2.500	1.60

Storage

When stored in dry conditions out of sunlight in original unopened packaging this product has a shelf life of 12 months. Storage above 35°C will reduce shelf life and product performance.

Health and Safety

Dr. Fixit Pidiseal PS43 is harmful if swallowed. Avoid contact with eyes and skin. Wear suitable protective gloves and eye/face protection. In case of contact with skin, wash immediately with soap and water. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical attention. Hands should be thoroughly washed with soap and water before eating or smoking. Cured sealant should not be burned off due to generation of toxic fumes. Empty containers should be disposed of in accordance with waste disposal regulations. For further details refer to Material Safety Data Sheets.

DR. FIXIT offers a wide range of Structural Protection and Waterproofing systems:

Pidilite MEA Chemicals LLC
PO Box 120657
Dubai, United Arab Emirates
T +971 4 884 9880 **F** +971 4 884 9879
Web: www.pidilitemea.com