X-CALIBUR CONSTRUCTION CHEMISTRY

Technical Data Sheet

X-Seal PS800

High performance polysulphide joint sealant

40101422

Product Description

X-Seal PS800 is a high performance polysulphide sealant for use in a variety of applications. It has excellent adhesion to most substrates and can be used in immersed conditions.

Advantages

- Meets SCAQMD Rule 1168 & LEED VOC Limits
- Formaldehyde free
- Can be used in immersed conditions
- Durable resilient seal
- High early movement accommodation
- Excellent application characteristics
- Can be used in contact with potable water
- Available in gun and pouring grades

Uses

- High movement joints
- General purpose joint sealing
- Joint sealing of:
  - Highway structures
  - Water retaining and excluding structures
  - Basement cladding
  - Floors
  - Subways

Specification Compliance

SCAQMD Rule 1168
LEED NC2009 IEQ 4.1
Estidama LBi-2.1
British Standard BS 4254
British Standard BS 6920
DCL Green Building Regulations
ASTM D1149 (Ozone Resistance)

Movement Accommodation (BS6093)

Butt joints: 25%
Lap joints: 50%

Application Properties

Property	Typical Results
Application temperature	0 to 60C
Pot life	2 hours at 35C
Initial cure	24 hours at 25C
Full cure	7 days at 25C
Service temperature	-35 to 120C

Guide to Quantities

Joint Size (mm)	Litres per metre run	Metre run per litre
6 x 6	0.03	33.33
10 x 10	0.10	10.00
13 x 13	0.17	5.92
15 x 15	0.22	4.44
20 x 15	0.30	3.33
20 x 20	0.40	2.50
25 x 15	0.37	2.70
25 x 20	0.50	2.00
25 x 25	0.62	1.60
30 x 20	0.60	1.66
30 x 25	0.75	1.33
30 x 30	0.90	1.11
40 x 25	1.00	1.00
40 x 30	1.20	0.83
40 x 40	1.60	0.62
50 x 25	1.25	0.80

Volatile Organic Content

VOC = Gun Grade - 36 g/L
VOC = Pouring Grade - 42 g/L

Color

Gun grade: Grey and white.
Pouring grade: Grey.

Packaging

Gun grade: 2.5 liter packs containing base and curing agent in the same can, separated by the color paste.
Pouring grade: 4 liter pack comprising separate base and curing agent.
PS800 Primer: 1 liter can.

Shelf Life

12 months when stored below 25°C under shade in a dry environment.

Joint Design Considerations

- X-Seal PS800 has a movement accommodation factor (MAF) of 25%. It can be applied in joints of 5 mm to 60mm wide and 10mm to 25mm deep.

- Minimum sealant depth:
  5mm: Impervious substrates
  10mm: All porous substrates
- 20mm: Traffic and hydrostatic joints.
- Movement joints should be designed to allow a sealant width to depth ratio of 2:1.
- In order to accommodate movement over the full width of the sealant, it must be debonded.
- Joints in concrete pavements are subject to vehicular traffic. Joint sealants should therefore always be fully supported and the sealant recessed to ensure that, at no time during the movement cycle, will the sealant extrude above the level of the pavement surface.
- For maximum performance, joint edges must be primed with the appropriate primer.

Installation Guidelines
X-Calibur provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

Joint Preparation
Joints should be accurately formed. Joint edges must be sound, dry and free from any contaminants. The joint edges must be prepared by grit blasting, grinding or by wire brushing to produce a rough clean surface. Care should be taken to ensure that the joint is formed to the required depth and any expansion joint filler is tightly packed in place.

Priming
Use X-Seal PS800 Primer. The primer should be applied to the joint sides using a clean, dry paint brush. Work the primer well into the substrate. After application of primer, debond the joint using siliconized debonding tape over the joint filler board. X-Seal PS800 should be applied once the primer is touch dry. The sealant should be applied between 1 and 3 hours after priming. If the primer is left to dry longer than 3 hours, the surfaces must be re-primed prior to applying the sealant.

Mixing
Gun Grade: The curing agent and base are packed in a single pack separated by the color paste**.** Mix with an X-Seal mixing paddle using a slow speed drill (400 to 500 rpm). Mix for three minutes to ensure complete mixing.
Pouring Grade: Add the entire contents of Part A (curing agent) to Part B (base component) and mix with an X-Seal mixing paddle using a slow speed drill (400 to 500rpm). Mix for three minutes more to ensure complete mixing. Temperature of the mixed sealant should be between 0C and 60C.

Application
Gun Grade
Apply using a sealant gun or direct from the can using a spatula.
Pouring Grade
Apply using a sealant gun designed for pouring grade sealants, or use direct from the can. The joint sealant should be slightly recessed.

Cleaning
Clean equipment using X-Shield Solvent S.

Limitations
Do not apply in rain or wet conditions or at temperatures below 0C.
Do not part mix.
Do not use in contact with asphalt.
Do not expose to aggressive chemicals.
Do not fully immerse the joint sealant until full cure is achieved.
Use in swimming pools is limited to pools that pre-mix the chemical additives prior to dosing to the pool.

Health and Safety
This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.x-calibur.us

Authorized Technical Specialist
Please note that only X-Calibur Authorized Technical Support Specialists ('ATSs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.x-calibur.us for a full list of X-Calibur ATSs.

Datasheet Validity
X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.x-calibur.us to ensure you have the latest version.

Warranties
X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to X-Calibur in writing within five working days of being detected. X-Calibur Construction Chemistry Inc. **makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties express or implied.** X-Calibur Construction Chemistry Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.