

Enviro Flex PU PRO

Low-modulus Polyurethane Joint Sealant

DESCRIPTION

Enviro Flex PU PRO is a high-performance, multi-purpose, neutral-cure, low-modulus elastomeric polyurethane joint sealant which, when cured, forms a permanently elastic, waterproof seal. It is certified for use in contact with drinking water.

CLASSIFICATION

BS 6920-1:2000 – Suitable for use in contact with water intended for human consumption.

AREAS OF USE

SURFACES: Concrete, renders, timber, masonry (brick, block), fibre cement sheet, and aluminium.

AREAS: Joints less than 50mm in concrete panels, fibre cement sheet, block, and brickwork, and around window and door frames – internal and external wet areas, basements, walls and floors, plant rooms, planter boxes, bathrooms, podiums, balconies, retaining walls, and potable water applications.

FEATURES & BENEFITS

- Certified to BS 6920-1:2000 for contact with drinking water.
- Excellent adhesion to typical construction materials
- Rapid skinning and fast cure
- UV stable with long-term durability
- Excellent bi-axial flexibility – permanently elastic over a wide temperature range
- Very low VOC, non-staining, low dirt pick-up
- Non-sag; easy to gun and tool, with short cut-off string.
- Resistant to ageing, weathering and immersion in cleaning agents, sea water, lime water, and dilute caustic solutions
- Paintable after cure with many water- and solvent-based paints

PRODUCT INFORMATION

Packaging	600mL (foil) sausages, 20 per carton
Colour	Grey (additional colours available subject to T's & C's)
Shelf Life	12 months in original sealed containers in a controlled environment. Sensitive to airborne moisture – use the full sausage once opened.
Compatible Primers	Enviro Prime PW

Compatible Membranes	Enviro HP1200
	Enviro HP1200 PW
	Enviro HP1600
	Enviro 700X
	Enviro 1000X
Compatible Coatings	Enviro 250 NS
	Enviro 900 IC
	Enviro 950 TC
	Enviro Clad

PHYSICAL PROPERTIES

Property	Test Method	Test Result
Appearance	–	Thixotropic Paste
Curing Mechanism	–	Moisture Curing
Cure-through Rate	23°C / 50% RH	2.0 mm/day
Tack-free Time	23°C / 50% RH	120–140 minutes
Shore A Hardness	23°C / 50% RH	25
Density	23°C / 50% RH	1.33 ±0.02 g/cm ³
Elastic Modulus @ 100%	–	≥0.4 N/mm ²
Tensile Strength	ISO 37 / DIN 53504	≥1.5 N/mm ²
Elongation	–	≥700%
Movement Accommodation Factor	–	25% of total movement
Application Temperature	–	5°C to 40°C
Temperature Resistance	–	–40°C to 90°C (up to 120 minutes)

COVERAGE RATE

Approx. 6 lineal metres per 600mL sausage at 10 × 10mm. Coverage depends on substrate type and condition.

Joint Width (mm)	Joint Depth (mm)	L per lineal m	m per 600mL
6	6	0.036	16.7
8	8	0.064	9.4
10	10	0.100	6.0
12	12	0.140	4.2
16	8	0.128	4.7



Enviro Flex PU PRO

Low-modulus Polyurethane Joint Sealant



Joint Width (mm)	Joint Depth (mm)	L per lineal m	m per 600mL
20	10	0.200	3.0
24	12	0.288	2.1
30	15	0.450	1.3
40	20	0.800	0.8

SUBSTRATE PREPARATION

Surfaces must be clean, dry, sound, and free of water, oil, grease, and rust. Remove loose particles with compressed air, sandpaper, or a stiff brush. Metal and other non-porous surfaces must be free of coatings and wiped clean with solvent. Sandblast or mechanically abrade pre-cast panels cast with release agents (other than polyethylene film). Provide drainage and falls in accordance with the relevant Australian Standard. Some substrates may need mechanical grinding to achieve an adequate profile.

- Concrete – cured min. 28 days
- Renders – cured min. 7 days
- Timber
- Masonry – brick, block, etc.
- Fibre cement sheet
- Aluminium

Priming: Generally, achieves excellent adhesion without primer. Brick, natural stone, paints, coatings, and treated surfaces can be difficult to bond to – carry out a preliminary adhesion test and, if necessary, prime the joint walls. If using a solvent-based primer, allow it to dry fully before applying the sealant. Contact EnviroSystems for approved primers.

APPLICATION

Apply Enviro Flex PU PRO with a suitable caulking or sausage gun, firmly into the joint so it fully contacts all sides. Keep the nozzle in the sealant and maintain a steady flow ahead of it to avoid air entrapment; avoid overlapping sealant.

Joint design: Use a bond breaker in all joints so the sealant does not adhere to the base. Place a closed-cell polyethylene backing rod at the correct depth. Recess concrete joints to avoid weak edges from laitance. For best performance, seal when the joint is at the mid-point of its designed movement.

Joint Width	Width : Depth Ratio
Joints up to 12mm Wide	1 : 1
Joints over 12mm Wide	2 : 1

Finishing: Tool to a smooth finish with a scraper dipped in soapy water, ensuring full contact with the sides and backing rod and breaking any air bubbles. Use masking tape for sharp lines and remove it while the sealant is still soft. Can be overpainted, but some coatings may crack under movement – test first.

Cure: Tack-free in 120–140 minutes; cures through at approximately 2.0mm per day.

For applications or situations not covered above, contact EnviroSystems technical support.

CLEANING

Clean tools and equipment before the sealant hardens with Enviro Thinner No. 1. Observe all safety information and the SDS relating to solvents. Cured material can only be removed mechanically.

LIMITATIONS

- Do not apply to concrete treated with artificial curing compounds, or to treated aluminium.
- Do not apply in high humidity or when rain is expected within 2 hours.
- Not suitable for contact with bitumen or bituminous products.
- Test oil-based paints for suitability before overcoating.

HEALTH & SAFETY ADVICE

Enviro Flex PU PRO is flammable. Keep away from naked flame; in the event of fire, extinguish with foam or CO₂. Provide adequate ventilation and wear PPE. Avoid breathing vapours and skin contact. If swallowed, DO NOT induce vomiting; give a glass of water and seek immediate medical advice. Wash skin with soap and water; if irritation occurs, seek immediate medical advice. Refer to the Safety Data Sheet for full safety and handling procedures.

KEEP OUT OF REACH OF CHILDREN

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this publication is based on the present state of our best knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to accuracy, reliability, or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

NOTE: Field service where provided does not constitute supervisory responsibility. Suggestions made by EnviroSystems, either verbally or in



Enviro Flex PU PRO

Low-modulus Polyurethane Joint Sealant



writing may be followed, modified, or rejected by the owner, engineer, or contractor since they, and not EnviroSystems, are responsible for carrying out procedures appropriate to a specific project.

NOTE: All products manufactured by EnviroSystems comply with the description and properties indicated in the technical data sheet that was current at the date of manufacture.

CONTACT ENVIROSYSTEMS

General Enquiries

info@envirosystems.com.au | 1300 WATERPROOF (1300 928 377)

New South Wales – Head Office

Ground Floor, 295 Princes Hwy, St Peters NSW 2044 |
nswsales@envirosystems.com.au

Queensland

Unit 3, 28 Burnside Rd, Yatala QLD 4207 | qldsales@envirosystems.com.au

Victoria

49 Wood St, Thomastown VIC 3074 | vicsales@envirosystems.com.au

Western Australia

78 Discovery Dr, Bibra Lake WA 6163 | wasales@envirosystems.com.au



SEALANTS