

Enviro SAFE+

One-part Silyl Modified Polymer High Modulus Construction Sealant



DESCRIPTION

Enviro SAFE+ is a one-component, gun-grade, non-sag Silyl Modified Polymer high modulus construction sealant. It cures under the influence of atmospheric moisture to form a high-performance compound with permanent elasticity and high resistance to ageing and weathering. Solvent- and isocyanate-free.

Certified according to:

EN 15651-1/3/4 TYPE F INT-EXT/ XS3/ PW EXT-INT CC
EMICODE EC1PLUS protocol
EUROFINS IAC GOLD protocol
VOC Emission class label A+

Compliant to:

ISO 11600 Type F Class 20 sub-class HM and LEED iEQc 4.1; SCAQMD Rule 1168; BAAQMD Reg 8 Rule 51

FEATURES

- Environmentally friendly – Free of isocyanates and solvents
- Excellent non-pick properties
- No bubble formation – Odorless
- Bonds and seals at the same time
- Permanently elastic; accommodates joint movement of $\pm 20\%$
- Easy to gun with excellent tooling consistency
- Exceptional thixotropy, non-sagging, short cut off string
- Excellent primerless adhesion on all typical construction and industrial materials
- Non-staining on concrete and porous materials
- Excellent resistance to ageing, weathering
- Over-paintable with many water and solvent based paints (preliminary tests recommended)

TYPICAL USES

Enviro SAFE+ is a versatile and performant construction sealant for expansion and construction joints in vertical and horizontal applications, sealing and bonding between different materials, external facades and cladding joints.

- Metal roofs & gutter sealing
- Aluminium & metal facades
- Weatherproofing of joints between brickwork
- Block work & masonry
- Glass
- Concrete & Glass reinforced concrete
- Metal
- Window & door frames
- Expansion & Construction Joints

PHYSICAL PROPERTIES

Appearance	Non-sag thixotropic paste
Colour	White, Grey, Black. Special colours on request
Curing Mechanism	Moisture curing
Chemical Nature	Silyl-Modified Polymer
Curing through volume [mm] (Enviro Method -7) (24h - 23°C and 50% R.H.)	Ca. 3.0
Hardness Shore A (DIN 53505)	Ca. 47
Density [g/cm³] (Enviro method 06) (23°C at 50% R.H.)	Ca. 1.51
Skin Time [min] (23°C T 50% R.H.)	Ca. 50
Elastic modulus at 100% [N/mm ²] (ISO 37 DIN 53504)	Ca. 0.6
Tensile Strength (N/mm²) (ISO 37 DIN 53504)	Ca. 3.0
Elongation at break [%] (ISO 37 DIN 53504)	Ca. >500
Joint movement capability (EN 15651/1; ISO 11600)	$\pm 50\%$ of joint width
Application Temperature	From +5°C to +40°C
Temperature Resistance (short term up to 120 mins)	-40°C to +100°C



SUBSTRATE PREPARATION

The surfaces to be treated should be perfectly clean, dry and free from dust and grease. However, varieties of brick, natural stone, plastics, paints, coatings, and other treatments of surfaces often presents a difficult surface to which to adhere.

Due to the number of unpredictable natures of these substrates, a preliminary test is recommended. Pre-cast panels using form-release agents other than polyethylene film must be sandblasted or mechanically abraded and dust free.

PRIMING

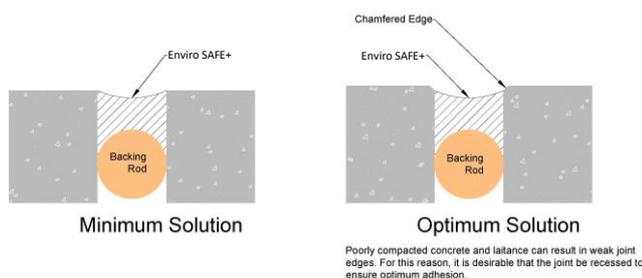
Enviro SAFE+ has very good adhesion properties without the use of primer on most common building materials. Consequently, the use of the primer is not necessary if the support to be sealed is properly prepared and consolidated.

APPLICATION

Recommended application temperatures: 15°-25°C. For easier use or cold weather application we recommend the material to be stored at approximately 25°C prior to use.

FOR SEALING PURPOSES

To guarantee free movement of sealant in joints, it is imperative that the sealant does not adhere to the bottom of the joint, therefore for correct joint making a closed-cell polyethylene bead (joint backing rod) is to be placed at the proper depth. Refer to below image.



If necessary, apply appropriate primer to joint sides and observe waiting time to avoid that trapped solvent, in condition of rising temperature, can blow bubbles in the uncured sealant.

For best performance, sealant should be gunned into joint when the joint slot is at mid-point of its designed expansion and contraction. Firmly extrude sealant into the joint making sure that it is in full contact with the sides of the joint and with the backing rod at the bottom. Keep the nozzle in the sealant, continue with a steady flow of sealant following the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air.

Tooling and finishing must be carried out within the tack-free time of the sealant. Enviro SAFE+ can be over-painted. The paint must be tested for compatibility by carrying out preliminary trials.

For further information regarding application of Enviro SAFE+ or for project specific advice please consult EnviroSystems via email:

customerservice@envirosystems.com.au

COVERAGE

The coverage of Enviro SAFE+ will depend on the type of substrate and its condition. When prepared and primed in accordance with the instructions above, the following coverage rates should be expected.

600ml Sausage	6 lineal metres (10mm x 10mm)
	3 lineal metres (20mm x 10mm)

PACKAGING & COLOURS

Enviro SAFE+ is supplied in a 600ml sausage, 20 sausages per carton.

CURE

Tack free time for Enviro SAFE+ is approximately 6 hours. Cure through time for Enviro Enviro SAFE+ is typically 3.0mm per day.

CLEANING

Clean the tools used with acetone or solvent. When the adhesive has not yet hardened, it can be removed using paper or a cloth. Once hardened, the product can only be removed mechanically. Avoid skin contact by using latex, rubber or polyethylene gloves. If it comes in contact with the skin, remove immediately and wash with soap and water.

SHELF LIFE

Enviro SAFE+ can be stored for 12 months in its original packaging (unopened container) between 10°C and 25°C in a cool, dry place. The storage temperature should not exceed 25°C for extended periods of time. Keep away from wet areas, direct sunlight and heat sources.

NOTE: Safety Data Sheets are available upon request by emailing customerservice@envirosystems.com.au



We're here to help you!

It is a good idea to keep a journal of your waterproofing job, whether big or small.

- Take pictures at all stages of your work, including preparation
- Record the quantity and description of products used with corresponding batch numbers
- Record dates and times of when you applied products, from start to finish

Please do not hesitate to contact us for any questions you may have.

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