

SEALBOND 458-PE

PILE SPLICING EPOXY

Product Description

SEALBOND PILE SPLICING EPOXY (458-PE) is a two-component fast setting epoxy formulation with a high chemical and physical strength, designed primarily for bonding concrete piles. The cured resin provides high compressive and flexural strength to the joined when used with fine aggregates as filler.

Features

- Fast Setting
- Excellent for splicing & for small coating application
- Used to secure anchor bolts, rebar and dowel in concrete
- High compressive & flexural Strength

Processing Data

Mix Ratio (by volume)	3 Part resin: 1 Part hardener 1 Part epoxy admixture: 6kg of Silica Sand
Initial Cure at 25 °C	20-25 minutes
Full Cured at 25 °C	55-60 minutes
Pot Life at 25 °C	8-12 minutes (w/ silica)
Shelf Life	1 year at room temperature

Technical / Performance Data

Viscosity at 25 °C	Component A	4,900 cps
	Component B	12 seconds #4 FC
Density	Component A	1.14 kg/liter
	Component B	0.95 kg/liter
Heat Resistance	Excellent	
Toxicity	Non-toxic when cured	
Resistance to Chemicals	Excellent	
Compressive Strength (Mortar) ASTM C109-95/ D695	30 mins.	5,000 -6,000 psi
	1-1/2 hour curing	10,000 -11,000 psi
	4 days curing	11,000-13,000 psi
Tensile Strength (ASTM D638-91)	1,500 – 2,500 psi at 7 days	
Flexural Strength (ASTM D790)	5,000 – 7,000 psi at 7 days	
Shear Strength	1,500 psi	
Hardness	Shore 85	

Procedure & Guidelines

SURFACE PREPARATION

GENERAL

Surfaces to be bonded must be dry and free of oil, dirt, grease, rust and other contaminants. Spoiled concrete or loose particle must be completely removed. The use of compressed air is highly recommended for cleaning the dowel holes in order to obtain a clean and structurally sound surface.

MIXING

Pre-measure enough quantities of resin base, hardeners and filler to be used. Sand should always be clean, dry and bagged. Mix thoroughly resin base with aggregates then add the hardener.

APPLICATION

Pour the admixture on the top surface of the lower pile and allow to flow into the dowel holes, to avoid air entrapment. Lower the upper pile and check for correct dimension and adhesion between the piles. Allow the epoxy mortar to cure.

SEALBOND 458-PE

Health & Safety

Avoid contact with eyes and skin and avoid breathing its vapor. This product may cause severe skin irritation after prolonged or repeated exposure. Keep containers tightly closed and store in a cool dry place.

Product is for Professional use only.

Storage / Packaging

SEALBOND 458-PE is available in gallon kit.

This product must be stored dry, protected from sun and rain. No waterproofing works should be performed if weather is unsuitable. These includes heavy rain and moisture

Product Limitations

Product can withstand heavy load but cannot withstand excessive abrasion.

Additional Information - Disclaimer

The information and in particular, recommendations relating to the application and end-use of Sealbond products, are given in good faith based on Sealbond's best knowledge and specialty on construction chemical formulations. Products are properly stored and handled in accordance with Sealbond's endorsements. Hence, subject to the care and method of application, deviations (from published values) in performance may occur. In practice, to different materials used, as well as varying working conditions and environments beyond our control Sealbond Chemical Industries Inc. strictly recommend carrying out intensive trials to test the suitability of the product with regards to the required processes and applications. Therefore, any liability for such recommendations or any oral/verbal advice is expressly excluded unless we have acted wilfully or by gross negligence. Sealbond Chemicals Industries Inc. is not liable for installation or faulty installation. It is always the responsibility of the installer/applicator/purchaser to guarantee and certify the installation of materials.

All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the Product Data Sheet for the product awareness, copies of which will be supplied on request and is free of charge.



A-2 Araneta St. Cor. Gen. Natividad St.
Bgy. Ibayo, Tipas Taguig City, Philippines

PH: (632) 881-8813 • (632) 883-1477 • (632) 845-0205
• (632) 843-4498 • (632) 845-0137
www.sealbondchemicals.com

..... Structural Concrete Repairs

JANUARY 2019

This technical data contained herein is true and accurate to the best of our knowledge on the date of publication and is subject to change without prior notice. User must contact Sealbond Chemical Industries Inc. to verify correctness before specifying or ordering. We assume no responsibility for coverage, performance or injuries resulting from use. Liability, if any, is limited replacement of products. Sealbond Hi-Performance is registered trademark of Sealbond Chemical Industries Inc.

www.sealbondchemicals.com