



PHILLYBOND® ORANGE – FLEXIBLE STERN TUBE SEALANT TECHNICAL DATA SHEET #646

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VERSION: E

PRODUCT DESCRIPTION

PHILLYBOND ORANGE is a two component, epoxy paste, developed for sealing exposed edges of CHOCKFAST in stern tube applications. It is resistant to sea water and lubricating oils. It has good adhesive strength and flexibility over a wide temperature range. Because of its paste-like consistency, it can be applied in thick, vertical applications without sagging, yet is easy to trowel and provide a smooth finished surface.

USE & BENEFITS

Excellent for sealing any type of gap where both mechanical and thermal expansion and contraction may take place. It adheres well to steel, brass, and other epoxies and epoxy chocking materials.

MIXING & APPLICATION INSTRUCTIONS

Please refer to the appropriate safety data sheet (SDS) prior to using this product.

The adhesion of PHILLYBOND ORANGE is dependent upon a clean, dry surface. All grease, rust, scale, and paint should be removed from the surface before application.

The preferred procedure is to solvent wipe the surface using Xylene or IMPAX IXT- 59 Solvent, sand or grind the area, and then repeat the solvent wipe. Clean rags saturated with the solvent should be used.

When filling sealing areas, it is recommended to design the depth of the sealant based on the width. Effective sealing applications work best with a depth approximately 1/2 of the width. If necessary, backer rod may be used to ensure

proper dimensions of Phillybond Orange. Please refer to **Figure 1** for additional information.

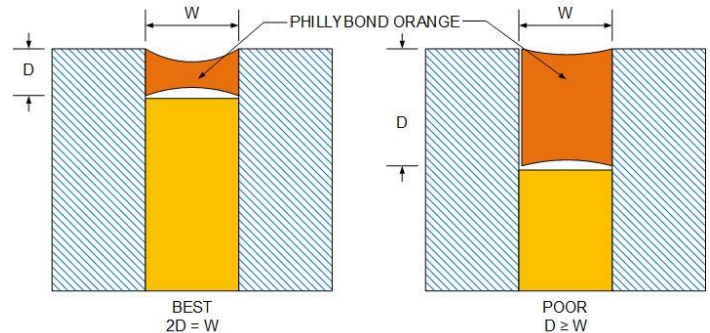


FIGURE 1: RECOMMENDED SIZING OF SEALANT

Take special precaution applying Phillybond Orange to surfaces that once had Silicone applied to them. Phillybond Orange will NOT adhere to those surfaces unless the Silicone is completely removed. The only way to completely remove Silicone is to burn it off using a small torch.

Please contact your local representative of our Worldwide Distributor Network or ITW Performance Polymers for any questions or support.

STORAGE RECOMMENDATIONS

All product components should be stored in a dry, shaded area in original unopened containers and within a temperature range of 65° - 95°F (16° - 35°C). For additional information, please refer to Technical Guide 1024.

PHYSICAL PROPERTIES

TENSILE STRENGTH	640 psi (4.41 MPa)	ASTM D638
ADHESIVE STRENGTH	On Steel – 567 psi (3.91 MPa) On Brass – 500 psi (3.45 MPa) On CHOCKFAST Orange – 563 psi (3.88 MPa)	
LAP SHEAR ON STEEL	424 psi (2.92 MPa)	ASTM D1002
ELONGATION	37.5%	
VISCOSITY, MIXED	464,000 cps (Paste Consistency)	

The data shown reflect typical results based on laboratory testing under controlled conditions. Variations from the above data are typical for field-prepared samples.

PRODUCT INFORMATION

UNIT COVERAGE	194 in ³ (3.18 L)
TYPICAL APPLICATION TEMPERATURES	55°F to 95°F (13°C to 35°C)
INITIAL CURE TIME (APPROXIMATE, BASED ON CONTACT SURFACE TEMPERATURES)	70°F (21°C) - 36 hrs. (Gel 5 hrs)
	60°F (15°C) - 48 hrs. (Gel 7 hrs)
POT LIFE (APPROXIMATE)	3 hours at 70°F (21°C)
MIXING RATIO	1:1, by Volume
PACKAGING PER UNIT	RESIN (A): 0.46 gal (1.74 L) in 1 gal can HARDENER (B): 0.38 gal (1.44 L) in 1 gal can
COMPONENT WEIGHTS	RESIN (A): 4.6 lbs. (2.09 kg) HARDENER (B): 3.8 lbs. (1.72 kg)
UNIT SHIPPING WEIGHT	13 Lbs. (5.90 kg)
COMPONENT COLORS	RESIN (A): Orange HARDENER (B): Amber MIXED (A + B): Orange
CLEAN UP	IMPAX IXT-59, or similar epoxy solvent
SHELF LIFE	2 years in dry storage
CHEMICAL RESISTANCE	Refer to Technical Guide 675

REFERENCE

For any additional recommendations or applications beyond the typical ones listed in this document, please contact your local representative of our Worldwide Distributor Network or ITW Performance Polymers for further support.

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ITW PERFORMANCE POLYMERS

130 Commerce Drive | Montgomeryville | PA 18936 | USA | T: +1-215-855-8450 | E-mail: customerservice.na@itwpp.com | www.itwperformancepolymers.com
Bay 150 | Shannon Industrial Estate | Shannon | County Clare | Ireland | T: +353 61 771 500 | E-mail: customerservice.shannon@itwpp.com