



PHILLYCLAD 1775/620TS – LOW-VISCOSITY LAMINATING & INJECTION RESIN SYSTEM

REVISED: 10/2023

TECHNICAL DATA SHEET #950

VERSION: C

PRODUCT DESCRIPTION

PHILLYCLAD 1775/620TS is an excellent general purpose, nontoxic resin system for applications requiring low-viscosity solutions as well as rapid and thorough wet out. In addition to being used commonly as a laminating resin with FRP applications, it is also excellent for use as a thin laminate protective coating over steel or wood and fabrication of molded fiberglass structures or components.

In addition, the PHILLYCLAD 1775/620 TS, formerly known as Concrete Adhesive, is designed for pressure injection repairs to concrete and adhesion of new concrete to old concrete.

USE & BENEFITS

Use PHILLYCLAD 1775/620TS to repair cracks in equipment foundations before grouting or to improve the bond between old concrete and new concrete.

MIXING & APPLICATION INSTRUCTIONS

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

PHILLYCLAD 1775/620TS is supplied in pre-measured,

one-gallon units. Mixing is accomplished by pouring the Hardener component into the slack filled Resin can and mixing until homogeneous. The use of a variable speed power mixer with a Jiffy mixer blade is recommended.

When using PHILLYCLAD 1775/620TS between new and old concrete, pour new concrete within 3 hours of application of PHILLYCLAD 1775/620TS while the adhesive is still wet to the touch.

Please see Technical Guide 970 for detailed information on the usage of Phillyclad 1775/620TS as a component of properly applied glass-reinforced epoxy laminate for propeller shafting or other metal surfaces exposed to severe marine environments, including MIL-STD-2199.

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

FLEXURAL STRENGTH	5,200 psi (323 kg/cm ²)	ASTM D790
FLEXURAL MODULUS OF ELASTICITY	1.15 x 10 ⁵ psi (80870 kg/cm ²)	ASTM C790
ELONGATION	30%	ASTM D638
TENSILE STRENGTH	4,050 psi (285 kg/cm ²)	ASTM D638
HARDNESS - BARCOL	62 @ 72°F (22°C) - 24 hours 78 @ 72°F (22°C) - 48 hours	
SPECIFIC GRAVITY	1.08	
VISCOSITY @ 72°F (22°C)	1,800 to 2,000 cps	

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	230 in ³ (3769 cm ³)
TYPICAL APPLICATION TEMPERATURES	55°F to 95°F (13°C to 35°C)
INITIAL CURE TIME (APPROXIMATE, BASED ON CONTACT SURFACE TEMPERATURES)	72°F (22°C) - 36 hrs.
	80°F (27°C) - 24 hrs.
POT LIFE (APPROXIMATE)	40 Minutes @ 72°F (22°C)
MIXING RATIO	4:3 by Volume 4.67:3 by Weight
PACKAGING PER UNIT	RESIN (A): 0.56 gal (2.1 L) in a 1 gal can HARDENER (B): 0.45 gal (1.7 L) in a ½ gal can
COMPONENT WEIGHTS	RESIN (A): 5.6 lbs (2.5 kg) HARDENER (B): 3.6 lbs (1.6 kg)
UNIT SHIPPING WEIGHT	10.5 lbs (4.8 kg)
COLOR	MIXED (A + B): Amber
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.

General: Every reasonable effort is made to insure the technical information and recommendations on these data pages are true and accurate to the best of our knowledge at the date of issuance. However, this information is subject to change without notice. Prior versions of this publication are invalid with the release of this version. Products and information are intended for use by qualified applicators that have the required background, technical knowledge, and equipment to perform said tasks in a satisfactory manner. Consult your local distributor for product availability, additional product information, and technical support. **Warranty:** ITW Performance Polymers, a division of Illinois Tool Works Inc., warrants that its products meet their printed specifications. This is the sole warranty. This warranty expires one year after product shipment. **Warranty Claims:** If any product fails to meet the above, ITW Performance Polymers will, at its option, either replace the product or refund the purchase price. ITW Performance Polymers will have no other liability for breach of warranty, negligence, or otherwise. All warranty claims must be made in writing within one year of the date of shipment. No other claims will be considered. **Disclaimer:** ITW Performance Polymers makes no other warranty, expressed or implied, and specifically disclaims any warranty of merchantability or fitness for a particular purpose. Suggestions concerning the use of products are not warranties. The purchaser assumes the responsibility for determining suitability of products and appropriate use. ITW Performance Polymers' sole liability, for breach of warranty, negligence or otherwise, shall be the replacement of product or refund of the purchase price, at ITW Performance Polymers' election. Under no circumstances shall ITW Performance Polymers be liable for any indirect, incidental or consequential damages. **Modification of Warranty:** No distributor or sales representative has the authority to change the above provisions. No change in the above provisions will be valid unless in writing and signed by an officer or the Technical Director of ITW Performance Polymers. No term of any purchase order shall serve to modify any provision of this document. **Mediation and Arbitration:** If any dispute arises relating to products or product warranties, either the purchaser or ITW Performance Polymers may a) initiate mediation under the then current Center for Public Resources (CPR) Model Procedure for Mediation of Business Disputes, or b) initiate a non-binding arbitration under the rules of the American Arbitration Association for the resolution of commercial disputes.

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