

PermaSeal™



“The Next Generation Repair System”
Tested and Proven at the EXTREMES

DESIGNED FOR LEAK CONTAINMENT

- *D.O.T./CSA/ASME PCC-2/ISO TS-24817 Compliant • No Shutdown*
- *No Hot Work • No Heavy Equipment • 30 Minute Installation*
- *“Smart Pig” Detectable*



THE COMPOSITE TECHNOLOGY COMPANY
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IC-QM-2405237

AN ADVANCEMENT IN PIPE REPAIR



GENERAL DESCRIPTION

The PermaSeal™ System is a high strength structural and leak containment system comprised of a conformable fiberglass-epoxy wet lay-up solution for on-site repair. The PermaSeal™ System is provided in pre-measured two-part epoxy components for field impregnation of the fabric material. The PermaSeal System is compliant with both ASME PCC-2 and ISO 24817 Design & Testing Standards.

MECHANICAL PROPERTIES	UNITS	ASTM TEST METHOD	VALUES
Tensile Strength – Hoop	PSI	D3039, A370, E8	86,600 (596 Mpa)
Tensile Strength – Axial	PSI	D3039, A370, E8	14,100 (97 Mpa)
Tensile Modulus	KSI	D3039	2940x10 ³ (20270 Mpa)
Interlaminar Shear	PSI	D5379	6,720 (46 Mpa)
Shear Modulus	KSI	D5379	1.19x10 ³ (8,204 Mpa)
Thermal Expansion	µin/in/°F	E831-6	8.63x10 ⁻⁶
Poisson's Ratio		D3039	0.44
Glass Transition (T _g)		D7028	216 °F (102 °C)
Hardness, Shore D		D 2240	80 - 85

PHYSICAL PROPERTIES

Fabric Widths	2", 4", 6" & 12"
	(5cm, 10cm, 15cm & 30,5cm)
Fabric Architecture	Tri-axial
Ply Thickness	0.028 inches (0.71mm)

GENERAL PARAMETERS

Maximum Operating Temperature	184 °F (84 °C)
Working Time (Temp Dependent)	40 minutes @ 77 °F
Set Time	1 Hour
Application Conditions	Above 55 °F (13 °C) Up to 140 °F (60 °C)
Cure Time	24-72 Hours
Chemical Resistance	Acetone, Ethyl Alcohol, Gasoline, MEK and other Hydrocarbons
Shelf Life	One Year @ 40 °F to 75 °F

BASE KIT CONTENTS

- ◆ Fiberglass Fabric
- ◆ Resin – Part A & Part B (pre-measured)
- ◆ Filler Kit – Part A & Part B (pre-measured)
- ◆ Adhesive Primer Kit
- ◆ Wet-out Kit (mixing tools, gloves)
- ◆ Constrictor Wrap

ADD KIT CONTENTS

- ◆ Fiberglass Fabric
- ◆ Wet-out Kit (mixing tools, gloves)

BENEFITS

- ◆ Quick & Easy Field Impregnation Process
- ◆ Conformable
- ◆ Pre-measured Resin Systems
- ◆ Adaptable to Field Conditions
- ◆ Wide range of T_g achieved with single system
- ◆ Both Structural & Leak Containing

TYPICAL USES

The PermaSeal™ System is used on piping systems exposed to corrosion (internal & external) or mechanical damage or defects associated with fabrication. The PermaSeal™ System is used to repair the following:

- ◆ Leaks
- ◆ External Corrosion
- ◆ Mechanical Damage (Dents, Gouges and Scratches)
- ◆ Weld Defects, Inclusions and other Fabrication Defects

For more information visit us at: www.wrapmasterglobal.us or email us at: sales@wrapmasterglobal.us

