



Appendix

Synopsis of 4-Year Corrosion Study

By Alpha/Owens Corning

The following chart shows the results from a study of the effects of fillers on the corrosion resistance of F-1105, a general purpose resin. This was a study of materials being considered for septic tanks and covered a period of four years, with the parts being exposed to a 10% acidic solution at room temperature.

	F-1105 UNFILLED General Purpose Resin				F-1105 FILLED 50% ATH				F-1105 FILLED 50% Calcium Carbonate (Sand)			
	Initial	2YR	3YR	4YR	Initial	2YR	3YR	4YR	Initial	2YR	3YR	4YR
Flexural Strength Percent Retention	100	99	87	94	100	93	68	76	100	84	71	58
Flexural Modulus Percent Retention	100	90	84	80	100	60	53	46	100	55	49	44
Strain Percent	100	113	108	120	100	153	126	163	100	150	141	129
Barcol Hardness Percent Retention	100	86.2	84.5	99	100	78.8	78.6	92	100	56.3	46.9	53
Appearance	100	A	A	A	100	C,G	C,G	C,G	C,G	C,G	C,G	C,G
A = Unchanged B = Deteriorated C = Edge Wicking E = Local Wicking G = Fiber Prominence H = Pitting J = Blisters K = Delamination												

“The data presented in this table is based on laboratory data developed under controlled conditions. We believe this information to be reliable, but do not guarantee its applicability to or fitness for any user’s process. Because the product performance is influenced by the user’s manufacturing conditions and other factors within the user’s control, it is the user’s responsibility to thoroughly test the product described herein to determine its fitness for a particular process or purpose before committing to production.”

-Bruce Curry, Alpha/Owens Corning March 3, 1997

Flexural Strength: Also known as “bending strength.” It describes how much a non-moving weight can be applied before a material yields or breaks. It is measured in thousands of pounds per square inch. Higher numbers mean the material is stronger and can withstand a heavier load.

Flexural Modulus: Measures the resistance of materials to bending loads. It is used to determine how far a material will bend when a given weight is applied across a given space. It is measured in millions of pounds per square inch. Higher numbers mean that there is

more resistance to deflection.

Strain: The elastic deformation of a material as a result of stress from applied weight or pressure.

Hardness: Describes the ability of a material to be indented. The Barcol method for measuring hardness forces a needle into the material and then measures the penetration of the point. Harder materials have more resistance to penetration by another substance and will record higher numbers.

PROGLASS, INC.
 P.O. Box 581 - Wauna, WA 98395
 www.proglassinc.com Email: proglass@msn.com
 Phone: 253-884-4008 Fax: 253-884-5064