

# Iten Industries

## Politen® G1HG10 Performance Values

| <u>Properties</u>         | <u>Test</u>      |            | <u>ASTM</u> | <u>Values</u>  |
|---------------------------|------------------|------------|-------------|----------------|
|                           | <u>Condition</u> |            |             |                |
| Thickness                 |                  |            |             | .125 inches    |
| Tensile Strength:         |                  | Lengthwise | D638        | 14,500 psi     |
|                           |                  | Crosswise  |             | 13,000 psi     |
| Flexural Strength:        | Condition A      | Lengthwise | D790        | 26,900 psi     |
|                           | Condition A      | Crosswise  |             | 26,200 psi     |
|                           | D48/50           | Lengthwise |             | 26,400 psi     |
|                           | D48/50           | Crosswise  |             | 23,400 psi     |
| Compressive Strength:     |                  | Lengthwise | D695        | 32,800 psi     |
|                           |                  | Crosswise  |             | 28,500 psi     |
| Izod Impact (notched):    | Condition A      | Lengthwise | D256        | 7.0 ft.lb./in. |
|                           | Condition A      | Crosswise  |             | 6.7 ft.lb./in. |
|                           | D48/50           | Lengthwise |             | 6.5 ft.lb./in. |
|                           | D48/50           | Crosswise  | D256        | 5.9 ft.lb./in. |
|                           | E48/50           | Lengthwise |             | 6.7 ft.lb./in. |
|                           | E48/50           | Crosswise  |             | 6.5 ft.lb./in. |
| Water Absorption          |                  |            | D570        | .68% of weight |
| Specific Gravity          |                  |            | D792        | 1.72           |
| U.L. Subject 94           |                  |            | UL94        | 94HB           |
| Dielectric Strength       |                  |            | D149        | 155 Vpm        |
| Dielectric Breakdown:     | Condition A      |            | D149        | 64.3 kV        |
|                           | D48/50           |            |             | 36.1 kV        |
| Arc Resistance:           | Condition A      |            | D495        | 85 seconds     |
|                           | D48/50           |            |             | 84 seconds     |
| Permittivity, 1MHz:       | Condition A      |            | D150        | 4.21           |
|                           | D24/23           |            |             | 4.30           |
| Dissipation Factor, 1MHz: | Condition A      |            | D150        | 0.0170         |
|                           | D24/23           |            |             | 0.0220         |
| Permittivity, 1KHz:       | Condition A      |            | D150        | 4.41           |
|                           | D24/23           |            |             | 4.95           |
| Dissipation Factor, 1KHz: | Condition A      |            | D150        | 0.0080         |
|                           | D24/23           |            |             | 0.0948         |

G1HG10 was formerly HG1

Standard Sheet sizes are 36" x 48", 48" x 48", 48" x 72", & 49" x 97"

Ashtabula, Ohio 44004 440-997-6134 Fax 440-992-3614

Addison, Illinois 60101 630-543-2820 Fax 630-543-1463

All values are average test results from typical production material. No warranty is implied or guaranteed and testing is recommended for each application.

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