



# REINFORCED POLYPROPYLENE

## SPECIFICATION SHEET

| Physical Property  | Test Method  | Property Of Unaged Sheet   | Property After Aging 30 days @ 185 °F                                      |
|--|--|--|--|
| Tolerance on nominal Thickness %   | ASTM D 5199  | ± 10   |  |
| Thickness over scrim, in (mm)<br>36-mil<br>45-mil<br>60 mil  | ASTM D4637<br>Optical Method                       | 0.010 (0.254) min.<br>0.013 (0.330) min.<br>0.018 (0.457) min.             |  |
| Mass per unit area, lb/ft <sup>2</sup> (g/ft <sup>2</sup> ) kg/m <sup>2</sup><br>36-mil<br>45-mil<br>60 mil                  | ASTM D5261   | 0.17(77)(.83) typical<br>0.21(95)(1.03) typical<br>0.29(132)(1.42) typical |  |
| Breaking strength, lbf(kN)<br>(grab tensile at strain rate of 12in./min)<br>36-mil<br>45 & 60-mil                            | ASTM D 751<br>Grab Method A                        | 200 (0.9) min 260 typ.<br>250 (1.1) min 300 typ.                           | 200(0.9) min 260 typ.<br>250(1.1) min 300 typ.                             |
| Elongation at break of fabric, %   | ASTM D 751   | 25 typical   | 25 typical   |
| Tearing strength, lbf (N)<br>(2 in./min. strain rate)<br>36-mil<br>45 & 50-mil   | ASTM D 5884<br>(max. load)                         | 80(356)min. 130(578) typ<br>100(445)min. 160(723) typ.                     |  |
| Low temperature flexibility, °F (°C)   | ASTM D 2136<br>1/8 mandrel<br>4 hour @ temp        | -40(-40) max.<br>-50(-46) typical  |  |
| Linear Dimensional Change (shrinkage),%  | ASTM D 1204  |  | ± 1.0 max.<br>-0.5 typical   |
| Ozone resistance, 100 pphm, 168 hours  | ASTM D 1149  | No cracks  | No cracks  |
| Resistance to water (distilled) absorption<br>After 30 days immersion 122 °F (50 °C)<br>Change in mass %                     | ASTM D 471<br>(coating compound)                   | 1.0 max<br>0.5 typical   |  |
| Hydrostatic resistance, lbf/in. <sup>2</sup> or psi (Mpa)<br>(Mullen burst)<br>36-mil<br>45-mil<br>60-mil                    | ASTM D 751<br>Procedure A                          | 350 (2.4) min<br>400 (2.8) typical<br>450(3.1) typical<br>500(3.4) typical | 350 (2.4) min<br>400 (2.8) typical<br>450(3.1) typical<br>500(3.4) typical |
| Field seam strength, lbf/in.(kN/m)<br>Seam tested in peel after weld   | ASTM D 4437<br>1 in. wide                          | 30(5.3) min.<br>60(10.5) typical   |  |
| Water vapor permeance, Perms   | ASTM E 96  | 0.10 max<br>0.05 typical   |  |
| Puncture resistance, lbf (N)<br>36-mil & 45 mil<br>60 mil  | ASTM D 4833<br>(index puncture)                    | 85(378) min.<br>110(489) typical<br>120(534) typical                       |  |
| Resistance to Xenon-arc weathering<br>Xenon-Arc, 15,120 kJ/m <sup>2</sup> total radiant<br>Exposure, visual condition at 10K | ASTM G 155<br>.70 W/m <sup>2</sup><br>80 °C B.P.T. | No cracks<br>No loss of breaking<br>Or tearing Strength                    |  |