

Properties	ASTM Test Method	Test Value		Testing Frequency (min.)
		1.50mm	2.00mm	
<b>Thickness, mm (min. ave.)</b> • lowest individual of 10 values	D 5199	nom. (mil) -10%	nom. (mil) -10%	per roll
<b>Density (min.)</b>	D 1505/ D 792	0.940g/cc	0.940g/cc	90,000kg
<b>Tensile Properties (1) (min. ave.)</b> • Yield Strength • Break Strength • Yield Elongation • Break Elongation	D 6693 Type IV	22kN/m 40kN/m 12% 700%	29kN/m 53kN/m 12% 700%	9,000kg
<b>Tear Resistance (min. ave.)</b>	D 1004	187N	249N	20,000kg
<b>Puncture Resistance (min. ave.)</b>	D 4833	480N	640N	20,000kg
<b>Stress Crack Resistance (min. ave.) (2)</b>	D 5397 (App.)	1000hr.	1000hr.	per GRI GM10
<b>Carbon Black Content, %</b>	D 1603 (3)	2.0-3.0%	2.0-3.0%	9,000kg
<b>Carbon Black Dispersion</b>	D 5596	note (4)	note (4)	20,000kg
<b>Oxidative Induction Time (OIT) (min. ave.) (5)</b> (a) Standard OIT or (b) High Pressure OIT	D 3895 D 5885	100 min. 600 min.	100 min. 600 min.	90,000kg
<b>Oven Ageing at 85°C (5), (6)</b> (a) Standard OIT (min. ave.), % retained after 90 days or (b) High Pressure OIT (min. ave.), % retained after 90 days	D 5721 D 3895 D 5885	55% 80%	55% 80%	per each formulation
<b>UV Resistance (7)</b> (a) Standard OIT (min. ave.) or (b) High Pressure OIT (min. ave.), % retained after 1600hrs (9)	D 3895 D 5885	N.R. (8) 75%	N.R. (8) 75%	per each formulation

- Machine direction (MD) and cross machine direction (XMD) average values should be on the basis of 5 test specimens each direction. Yield elongation is calculated using a gauge length of 33mm. Break elongation is calculated using a gauge length of 50mm.
- The yield stress used to calculate the applied load for the SP-NCTL test should be the manufacturer's mean value via MQC testing.
- Other methods such as D 4218 (muffle furnace) or microwave methods are acceptable if an appropriate correlation to D 1603 (tube furnace) can be established.
- Carbon black dispersion (only near spherical agglomerates) for 10 different views: 9 in Categories 1 or 2 and 1 in Category 3.
- The manufacturer has the option to select either one of the OIT methods listed to evaluate the antioxidant content in the geomembrane.
- It is also recommended to evaluate samples at 30 and 60 days to compare with the 90 day response.
- The condition of the test should be 20hr. UV cycle at 75°C followed by 4hr. Condensation at 60°C.
- Not recommended since the high temperature of the Std-OIT test produces an unrealistic result for some of the antioxidants in the UV exposed samples.
- UV resistance is based on percent retained value regardless of the original HP-OIT value.

*This data is based on GRI GM13 Revision 9: 06/01/09. It is provided for informational purposes only and is not intended as a warranty or guarantee. Viking Containment assumes no responsibility in connection with the use of this data. These values are subject to change without notice. Please contact us for updated information.*

### Colours & Finishes

Black smooth finish (standard). Custom Colours available upon request.

### Dimensions

Agrishield is available in thicknesses of 1.5mm to 2mm, roll sizes vary and are available upon request.