



GSE STANDARD PRODUCTS

Product Data Sheet

GSE UltraFlex White Geomembranes

GSE UltraFlex White is the white surfaced version of GSE UltraFlex. Manufactured from a premium grade linear low density polyethylene resin specially formulated for geomembrane applications, this product provides high uniaxial and multi-axial elongation characteristics making it very suitable for applications where differential or localized subgrade settlements are expected such as leach pads, landfill closure caps, or any application where elongation or puncture resistance is critical. GSE UltraFlex White is the only material of its type on the market with many years of proven performance in applications throughout the world. GSE's patented white surface reduces heat buildup on the liner by reflecting solar energy. Reducing liner temperature leads to fewer wrinkles and less subgrade desiccation. *These product specifications meet or exceed GRI GM17.*

GSE Advantage Products

GSE GundSeal • GSE Conductive • GSE White • GSE PermaNet • GSE BioDrain System

Product Specifications

TESTED PROPERTY	TEST METHOD	FREQUENCY	MINIMUM VALUE	
Product Code			LLD040A010	LLD060A010
Thickness, (minimum average) mil (mm)	ASTM D 5199	every roll	40 (1.00)	60 (1.50)
Lowest individual reading (-10%)			36 (0.91)	54 (1.40)
Density ⁽²⁾ , g/cm ³	ASTM D 1505	200,000 lb	0.92	0.92
Tensile Properties (each direction)	ASTM D 6693, Type IV	20,000 lb		
Strength at Break, lb/in-width (N/mm)	Dumbell, 2 ipm		152 (27)	228 (40)
Elongation at Break, %	G.L. = 2.0 in (51 mm)		800	800
Tear Resistance, lb (N)	ASTM D 1004	45,000 lb	22 (98)	33 (147)
Puncture Resistance, lb (N)	ASTM D 4833	45,000 lb	56 (250)	84 (370)
Carbon Black Content ^{(1) (2)} , %	ASTM D 1603*/4218	20,000 lb	2.0	2.0
Carbon Black Dispersion	ASTM D 5596	45,000 lb	+Note 1	+Note 1
REFERENCE PROPERTY	TEST METHOD	FREQUENCY	NOMINAL VALUE	
Oxidative Induction Time ⁽²⁾ , min	ASTM D 3895, 200° C; O ₂ 1 atm	200,000 lb	>100	>100
Roll Length ⁽³⁾ (approximate), ft (m)			870 (265)	560 (171)
Roll Width ⁽³⁾ , ft (m)			22.5 (6.9)	22.5 (6.9)
Roll Area, ft ² (m ²)			19,575 (1,819)	12,600 (1,171)

NOTES:

- +Note 1: Dispersion only applies to near spherical agglomerates. 9 of 10 views shall be Category 1 or 2. No more than 1 view from Category 3.
- GSE UltraFlex White is available in rolls weighing about 3,800 lb (1,724 kg).
- ⁽¹⁾GSE UltraFlex White may have an overall ash content greater than 3.0% due to the white layer.
- All GSE geomembranes have dimensional stability of ±2% when tested with ASTM D 1204 and ITB of <-77° C when tested with ASTM D 746.
- ⁽²⁾The values apply to the black layer only.
- ⁽³⁾Roll lengths and widths have a tolerance of ± 1%.
- *Modified.

DS021 UflexWH R01/07/08

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