




Global Synthetics

**GS\_028 LLDPE  
Single Side  
Textured  
Geomembrane**



# Global Synthetics GS\_028 LLDPE Single Side Textured Geomembrane Owner's Manual

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**Global Synthetics**

**Global Synthetics GS\_028 LLDPE Single Side Textured Geomembrane**



**Specifications**

**Product:** LLDPE Single Side Textured Geomembrane

**Applications:** High friction lining material for leachate pads, channels, dams & containment structures

**Product Data Sheet**

Properties	Unit	Value
Thickness Average nom. (-5%)	mm	1.00 – 2.50 (varies by grade)
Asperity Height (min avg.)	mm	0.4

**Product Usage Instructions**

**Preparation**

1. Ensure the surface is clean, dry, and free from any debris.
2. Check the compatibility of the geomembrane with the substrate.

**Installation**

1. Unroll the geomembrane carefully over the designated area.
2. Secure the edges of the geomembrane using appropriate fasteners.

**Maintenance**

1. Regularly inspect the geomembrane for any signs of damage or wear.
2. Clean the geomembrane periodically to prevent dirt buildup.

A high friction lining material for leachate pads, channels, dams & containment structures



## Product Information

LLDPE smooth/textured geomembranes have a generalised use as high friction lining materials for leachate pads, channels, dams & containment structures. LLDPE is a polymer with very short & uniform branches which make its melt temperature, tensile strength & cracking resistance superior to LDPE. ProLiner® LLDPE is a non polar, semicrystalline thermoplastic with good mechanical properties, high chemical stability & electrical insulation. ProLiner LLDPE does not absorb humidity, is odourless & is physically inert. ProLiner LLDPE geomembranes are manufactured with resins which are specially formulated & certified.

LLDPE smooth/textured geomembranes have a density from 0.928 – 0.939 g/cm<sup>3</sup>. ProLiner® LLDPE smooth/textured geomembranes have low permeability, high stress resistance & flexibility, high break elongation & good chemical & UV resistance (2-3% carbon black). ProLiner® LLDPE smooth/textured geomembranes offer improved frictional resistance of the liner on steep slopes.

All ProLiner® LLDPE geomembranes are manufactured to exceed the requirements of GRI GM17 standards.

## Applications

The use of membranes in civil and environmental applications is becoming more widespread as there develops a greater understanding of the effects of contaminated ground conditions on structures and the environment.

Global Synthetics are able to offer a wide range of membranes that are compatible with the diverse range of applications and contaminants likely to be encountered.

## Product Data Sheet

Product Grade

Properties	Unit	Test Method	Standard 1.00mm	Standard 1.50mm	Standard 2.00mm	Standard 2.50mm
Thickness Average nom. (-5% )	mm	ASTM D 5994	0.95	1.425	1.9	2.375

Thickness Minimum (-15%)	mm	ASTM D 5994	0.85	1.275	1.70	2.125
Asperity Height (min avg.)	mm	ASTM D 7466	0.4	0.4	0.4	0.4
Density (max)	g/cm3	ASTM D 792	0.939	0.939	0.939	0.939
Tensile Properties		ASTM D 6693 (Type IV)	11	16	21	26
Break Strength kN/m						
Break Elongation %			350	350	350	350
2% Modulus (max)	N/mm	ASTM D 5323	420	630	840	1050
Tear Resistance	N	ASTM D 1004	100	153	204	255
Puncture Resistance	N	ASTM D 4833	240	340	440	550
Axi-Symmetric Break Resistance Strain % (min)		ASTM D 5617	30	30	30	30
Carbon Black Content	%	ASTM D 1603	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0
Carbon Black Dispersion	Cat	ASTM D 5596	1-2	1-2	1-2	1-2
Oxidative Induction Time (OIT)	min	ASTM D 3895	100	100	100	100
Oven Ageing at 850C	%	ASTM D 8721	35	35	35	35
Standard OIT (90days)						
or						
High Pressure OIT (90 days)		ASTM D 3895	60	60	60	60
UV Resistance %		GM 11	35	35	35	35
High Pressure OIT (1600 hours)		ASTM D 5885				
Roll Size	m	—	8×150	8×100	8×80	8×60

ProLiner® is a registered trademark of Global Synthetics Pty Ltd.

ProLiner® is manufactured to ISO9001, quality assurance procedure. Properties of ProLiner® are minimum typical roll values unless otherwise noted. (GM) refers to the Geosynthetic Research Institute GRI-USA.

## About Us

### Leaders in Geosynthetics

Global Synthetics is a 100% Australian-owned company, proud to offer a complete range of high-quality geosynthetic products backed by over 200 years of combined staff experience in the industry. We have supplied products to some of the largest recent infrastructure works in Australia. Global Synthetics provides major benefits to any geotechnical engineering project with the right products and our technical expertise.

Global Synthetics products are used in the following applications:

- Pavement Stabilisation
- Ground Improvement
- Soil Reinforcement and Retaining Structures
- Water Management
- Drainage Systems & Hydraulic Works
- Landfills
- Coastal Erosion Structures

### Get in Touch

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## FAQ

**Q: What are some common applications of the LLDPE Single Side Textured Geomembrane?**

**A:** The geomembrane is commonly used in leachate pads, channels, dams, and containment structures.

**Q: How can I contact Global Synthetics for more information?**

**A:** You can visit their website at [globalsynthetics.com.au](http://globalsynthetics.com.au) or [globalsynthetics.co.nz](http://globalsynthetics.co.nz), or contact them via email or phone using the provided contact details.

## Documents / Resources

	<p><a href="#">Global Synthetics GS_028 LLDPE Single Side Textured Geomembrane</a> [pdf] Owner's Manual</p> <p>GS_028, GS_028 LLDPE Single Side Textured Geomembrane, LLDPE Single Side Textured Geomembrane, Single Side Textured Geomembrane, Textured Geomembrane, Geomembrane</p>
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## References

- [User Manual](#)

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