

GEONAP E HDPE Geomembrane



0099-CPD-A86-0002

DESCRIPTION AND SCOPE OF APPLICATION

GEONAP E is a black high density polyethylene (HDPE) geomembrane. The chemical inertia of HDPE confers to **GEONAP E** a high resistance to chemical attacks.

A list of resistance to chemical and other media is available to the SIPLAST technical department.

GEONAP E contains approximately 97.2% polyethylene, 2.2% carbon black and trace amounts of antioxidants and heat stabilizers. **GEONAP E** has an excellent resistance to UV and is suitable for exposed applications.



Products in 1.5mm benefits of ASQUAL certification.

PHYSICAL AND MECHANICAL CHARACTERISTICS

GEONAP E	Units	Test Methods	Average values		
			1	1.5	2
Thickness	mm	EN 1849-2			
Nominal weight / m ²	g/m ²	EN 1849-2	965	1425	1900
Tensile properties (MD / CMD) ⁽¹⁾ :					
Stress at break	MPa	EN ISO 527-1	29/30	29/30	29/30
Elongation at break	%		710/770	740/830	770/850
Stress at yield	MPa		17/18	18/19	20/20
Elongation at yield	%		16/16	16/16	16/16
Tear resistance (MD/CMD)	N/mm	ISO 34	160/156	168/166	170/165
Resistance to static puncture	kN	EN ISO 12236	4	4,5	5
Density	g/cm ³	EN ISO 1183-1	≥0.94	≥0.94	≥0.94
Oxidation Induction Time (OIT)	min	EN 728 (200 °C, O ₂ pur, 1 atm)	≥80	≥80	≥80
Carbon black content	%	ASTM D1603	2.2	2.2	2.2
Carbon black dispersion		ISO 18553	Conforme	Conforme	Conforme
UV resistance ⁽²⁾		EN ISO 11507	No loss in tensile properties		

⁽¹⁾ MD: Machine Direction CMD: Cross Direction

⁽²⁾ Test-conditions : 4 hours UV cycle at 60 °C followed by 4 hours condensation at 50 °C; Total : 3000 hours.

Product Technical Information

ITA/ATEXP/ 489

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2/2

PACKAGING

	Thickness	Width	Length	Nominal weight/roll	Surface/roll	Rolls/truck	Surface/truck
GEONAP E	1 mm	6 m	200 m	1160 kg	1200 m ²	20	24 000 m ²
	1.5 mm	6 m	140 m	1230 kg	840 m ²	20	16800 m ²
	2 mm	6 m	100 m	1175 kg	600 m ²	20	12000 m ²

- Rolls are equipped with PVC mandrels for handling and storage facilities.
- A marking every one meter at 150 mm of the roll edge shows the longitudinal overlap and indicates the length of the roll.
- This product is not classified as dangerous according to the international regulation of transport.
- **GEONAP E** rolls are also available in 3m and 5.70m wide.

ACCESSORY

GEONAP E cordon: HDPE extrusion wire (diameter: 4 mm) used for extrusion welding by hand extruders.

GEONAP E cordon is packed in bobbins of 5 kg (app. 420 m).