

Geochem

Geomembrane Black Compound

Applications

Geochem is high density polyethylene black compound, which provide a combination of flexibility with very high toughness and stress crack resistance. A specific carbon black is incorporated into Geochem Polyethylene resin to arrive at a fully stabilized, homogeneous black sheet with excellent weldability. Sheeting thus produced meets the requirement of Guidline and Standard controlling general water barrier membrane.

Physical Properties

Item	Typical Value	Unit	Test Method
Melt Flow Index (190°C/2.16kg)	0.3	g/10min	ISO 1133
Melt Flow Index (190°C/5kg)		g/10min	ISO 1133
Density	0.94	gr/cm ³	ASTM D792
Thickness of Geomembrane	0.75	mm	ASTM D5199
Melting Point (DSC)	>125	°C	ISO 11357-3
Crystallization Temperature (DSC)	113	°C	ISO 11357-3
Heat Of Fusion (DSC)	188.5	j/gr	ISO 11357-3
Oxidative Induction Time (OIT)	>90	min	ISO 11357-6
CB Dispersion	Cat1&Cat2		ASTM D5596
CB Content	2.2	%	ASTM D1603
Tensile Strength at Break (TD)	21.97	KN/m	ASTM D6693-IV
Elongation at Break (TD)	719	%	ASTM D6693-IV
Tensile Strength at Break (MD)	27	KN/m	ASTM D6693-IV
Elongation at Break (MD)	842	%	ASTM D6693-IV
Tensile Strength at Yield (TD)	12.6	KN/m	ASTM D6693-IV
Elongation at Yield (TD)	16	%	ASTM D6693-IV

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Item	Typical Value	Unit	Test Method
Tensile Strength at Yield (MD)	11.8	KN/m	ASTM D6693-IV
Elongation at Yield (MD)	17.8	%	ASTM D6693-IV
Tear Resistance (TD)	130	N	ASTM D1004
Tear Resistance (MD)	134	N	ASTM D1004
Puncture Resistance	325	N	ASTM D4833

❖ General

Geochem

- Excellent CB dispersion
- Typical extrusion temperature range is 190 -230 C.
- Containing stabilizer to Long and short term Processing
- Heavy sheeting

❖ Packaging

Geochem is supplied in regular pellet form packed in 25kg bags. It should be stored in a dry place