

## **Haysite H1000 Polyester Laminate**

Category: Polymer, Thermoset, Polyester, TS, Thermoset Polyester Glass SMC

## **Material Notes:**

Haysite Grade 1000 laminate sheet is an outstanding material that is used in applications requiring exceptional weather and corrosion resistance. Grade H1000's unique polyester resin system provides corrosion resistance in sunlight and harsh weather environments in addition to meeting NEMA GPO-3 specifications for track resistance, flame retardance, heat resistance and physical properties. H1000 is particularly qualified for applications in the transportation industry due to its' low smoke generation, low smoke toxicity & halogen-free flame retardants. H1000 meets the rigid New York City Transit - Specification #64. Transit Authorities use Grade H1000 under their 3rd rail ties to provide electrical insulation, corrosion protection, UV resistance & most importantly to insure low smoke/flame toxicity in case of electrical failure. H1000, in a pultruded profile shape is used for electrical insulation for electrical cables, conduit & 3rd rail protection for workers.Information provided by Haysite

Order this product through the following link: http://www.lookpolymers.com/polymer\_Haysite-H1000-Polyester-Laminate.php

Physical Properties	Metric	English	Comments
Water Absorption	0.16 %	0.16 %	ASTM D570

Mechanical Properties	Metric	English	Comments
Tensile Strength	89.6 MPa	13000 psi	CW; ASTM D638
	93.1 MPa	13500 psi	LW; ASTM D638
Tensile Modulus	11.4 GPa	1650 ksi	LW; ASTM D638
	11.4 GPa	1650 ksi	CW; ASTM D638
Flexural Strength	155 MPa	22500 psi	CW; ASTM D790
	178 MPa	25800 psi	LW; ASTM D790
Flexural Modulus	9.17 GPa	1330 ksi	CW; ASTM D790
	13.0 GPa	1880 ksi	LW; ASTM D790
Compressive Strength	207 MPa	30000 psi	Flatwise; ASTM D695
Izod Impact, Notched	5.55 J/cm	10.4 ft-lb/in	CW; ASTM D257
	6.41 J/cm	12.0 ft-lb/in	LW; ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	12.6 µm/m-°С	7.00 µin/in-°F	ASTM D696
Flammability, UL94	V-0	V-0	



Thermal Properties	Metric	English	Comments
Smoke Density	4.0 min	4.0 min	6.3 Optical Density; ASTM E661

Electrical Properties	Metric	English	Comments
Dielectric Strength	11.4 kV/mm	290 kV/in	Perpendicular; ASTM D149
Arc Resistance	193 sec	193 sec	ASTM D495
Track Resistance	>= 11 sec	>= 11 sec	ASTM D2303
	@Thickness 6.35 mm	@Thickness 0.250 in	

Value	Comments
35 seconds	Burning Time, ASTM D229
80 seconds	Ignition Time, ASTM D229
15.9	ASTM E162
Aldehydes	10 ppm, BSS7239
Carbon Dioxide	2400 ppm, BSS7239
Carbon Monoxide	700 ppm, BSS7239
Hydrogen Bromide	0.5 ppm, BSS7239
Oxides of Nitrogen	4.5 ppm, BSS7239
Smoke Developed Index	165, ASTM E84
	35 seconds 80 seconds 15.9 Aldehydes Carbon Dioxide Carbon Monoxide Hydrogen Bromide Oxides of Nitrogen

## **Contact Songhan Plastic Technology Co.,Ltd.**

Website: www.lookpolymers.com Email: sales@lookpolymers.com

Tel: +86 021-51131842 Mobile: +86 13061808058

Skype: lookpolymers

Address: United North Road 215, Fengxian District, Shanghai City, China