CS Hyde Company

1351 N. Milwaukee Ave.,
Lake Villa, IL 60046
Ph. 847-395-0325 Fax 847-395-0334
sales@cshyde.com / www.cshyde.com

PRODUCT INFORMATION

36-__F
ULTEM 1000

This film offers high heat resistance coupled with high strength, stiffness, UV stability and broad chemical resistance. The combination of outstanding thermal, mechanical and electrical properties together with exceptional flame resistance and thermoform-ability, provide unprecedented performance for a wide variety of demanding new design concepts.

The following physical property information is based on typical values of the base Ultem® 1000 resin as well as test results obtained from actual film testing.

ELECTRICAL Properties	Test Method	Result	
		Metric	English
Surface Resistivity	ASTM D257	$>10^{16}$ Ohms	$>10^{16}$ Ohms
Dielectric Strength at 0.003	ASTM D149	120 V/µm	3050 V/mil
Dielectric Constant	ASTM D150	3.15 1 kHz	3.15 1 kHz
Dissipation Factor	ASTM D150	0.0013 10 kHz	0.0013 10 kHz
MECHANICAL Properties	**Test Method**	**Result**	
		Metric	**English**
Tensile Strength at yield	ASTM D882	98 MPa	14.2 kpsi
Elongation at break	ASTM D882	52 %	52 %
Tensile Modulus	ASTM D882	3275 MPa	475 kpsi
Flexural Modulus	ASTM D790	331 MPa	48 kpsi
Tear Strength – prop.	ASTM D1004		381 g/mil
OTHER Properties	**Test Method**	**Result**	
		Metric	**English**
Specific Gravity	ASTM D792	1.27	1.27
Water Absorption at 24 hours	ASTM D570	0.25 %	0.25 %
Refractive Index	-	1.658	1.658
Haze	ASTM D1003	%	%
Area Factor	-		21888 in²/lb/mil
THERMAL Properties	**Test Method**	**Result**	
		Metric	**English**
Continuous Use Temp. -UL	-	170 ºC	338 ºF
Heat Deflection Temp. at 264 psi	ASTM D648	201 ºC	394 ºF
Melt Temp – DSC	-	ºC	ºF
Glass Transition Temp.	ASTM D3418	216 ºC	420 ºF
UL Rating – UL94	-	VTM-0	VTM-0
L.O.I.	ASTM D2862	27 %	27%
NBS Smoke	ASTM E662	6 DMax	6 DMax

*The above values are "Typical Values" which have a nominal range about them and are not intended for specification purposes.