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Properties of SHINKOLITE™ FR

Property		Test Method	Unit	FR1	FR2	FR3
General	Density[a, b]	ISO 1183-1: method A or C, or ISO 1183-2	g/cm^3	1.22	1.18	1.20
Optical	Total luminous transmittance[a]	ISO 13468-1	%	93	93	93
	Haze[a]	ISO 14782	%	0.5	0.5	0.5
Mechanical	Tensile strength	ISO 527-2/1B/5	MPa	65	65	60
	Tensile strain	ISO 527-2/1B/5	%	4.0	3.5	3.0
	Modulus of elasticity in tension	ISO 527-2/1B/1	MPa	3100	3200	3200
	Flexural Strength	ISO 178	MPa	105	90	80
	Charpy impact strength (Unnotched)	ISO 179-1/1fU	KJ/m^2	15	11	11
	Rockwell Hardness	ISO 2039-2	Scale M	98	98	95
Thermal	Temperature of deflection under load	ISO 75-2: method A	℃	85	90	75
	Linear expansion coefficient	ISO 11359-2	$℃^{-1}$	7E-05	7E-05	7E-05
Miscellaneous	Flammability	UL 94		equiv. HB	equiv. HB	V-0
	Water Absorption (Saturated)	MCC method	%	2.4	1.7	2.0

a For transparent, colorless material.
b Colored sheets may have a higher value.

ShinkoLite™
The art of performing beauty

Shinkolite™ is a registered trademark of Mitsubishi Chemical Corporation.
Typical values should not be used for specification purpose.

https://www.m-chemical.co.jp/shinkolite/index.html

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Mitsubishi Chemical Corporation
PMMA Technology Dept.