MITSUBISHI CHEMICAL CORPORATION

1-1, Marunouchi 1-Chome, Chiyoda-ku, Tokyo, 100-8251, Japan
Phone:+81-3-6748-7526 Fax:+81-3-3286-1418

Properties of SHINKOLITE™ PX200 / PX500

Property		Test Method	Unit	PX200	PX500
General	Density[a, b]	ISO 1183-1: method A	g/cm^3	1.19	1.19
Optical	Refractive index、n_D^{23}	ISO 489: method A		1.49	1.49
	Total luminous transmittance[a]	ISO 13468-1	%	93	93
	Haze[a]	ISO 14782	%	0.5	0.5
Mechanical	Tensile strength	ISO 527-2/1B/5	MPa	74	74
	Tensile strain	ISO 527-2/1B/5	%	4.2	4.2
	Modulus of elasticity in tension	ISO 527-2/1B/1	MPa	3200	3200
	Flexural Strength	ISO 178	MPa	120	120
	Charpy impact strength	ISO 179-1/1fU	KJ/m^2	17	17
	Rockwell Hardness	ISO 2039-2	Scale M	100	100
	Barcol Hardness	(934-1)		52	52
Thermal	Vicat softening temperature	ISO 306: method B50	℃	104	108
	Linear expansion coefficient	ISO 11359-2	$℃^{-1}$	7E-05	7E-05
	Coefficient of thermal conductivity		W/mK	0.21	0.21
	Specific heat		J/g℃	1.5	1.5
	Forming Temperature		℃	140-200	140-200
Electrical	Surface Resistivity	IEC 93	Ω	＞1E16	＞1E16
	Volume Resistivity	IEC 93	Ωcm	＞1E16	＞1E16
	Dielectric Strength,Short Time Test	IEC 93	kV/mm	20	20
Miscellaneous	Flammability	UL 94		HB	HB
	Water Absorption[c]	ISO 62 method 1 (24 h)	%	0.3	0.3
	Soluble Matter Lost after Immersion		%	0.0	0.0

a For transparent, colorless material.
b Colored sheets may have a higher value.
c Value reported refers to a square specimen of edge 50 mm and thickness 3 mm.

Typical values should not be used for specification purpose.

ShinkoLite
The art of performing beauty

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

21-Jun-2022
Mitsubishi Chemical Corporation
PMMA Technology Dept.