

Properties of SHINKOLITE™ Museum (NF30)

thickness : 3mm

Property		Test Method	Unit	MR200R NF30	L NF30	L #001
General	Density	ISO 1183-1: method A or C, or ISO 1183-2	g/cm ³	1.19	1.19	1.19
Optical	Total luminous transmittance	ISO 13468-1	%	92	93	93
	Spectral Transmittance at 400 nm		%	0.3	0.3	90
	Spectral Transmittance at 440 nm		%	91	92	92
	Haze	ISO 14782	%	0.5	0.5	0.5
Mechanical	Tensile strength	ISO 527-2/1B/5	MPa	60	75	75
	Tensile strain	ISO 527-2/1B/5	%	2.5	4.5	4.5
	Modulus of elasticity in tension	ISO 527-2/1B/1	MPa	3200	3200	3200
Thermal	Temperature of deflection under load	ISO 75-2: method A	°C	100	100	100
Mar Resistance	Steel Wool Test	^a		No scratch	Many scratches	Many scratches
	Pencil Hardness	ISO 15184 (750g load)		4H	HB	HB
Contact Angle	Water	JIS R 3257	degree	75	75	75
	Triolein	JIS R 3257	degree	20	20	20
Electrical	Surface Resistivity	IEC 93	Ω	> 1E16	> 1E16	> 1E16
Miscellaneous	Saturated Water Absorption	^b	%	2.0	2.0	2.0
Chemical ^c	Acetone			No change	×	×
	Methanol			No change	△	△
	Artificial Sweat aq. (Acidic)			No change	No change	No change
	Artificial Sweat aq. (Alkaline)			No change	No change	No change
	Alkali aq.			No change	No change	No change

^a Whether or not some scratch can be observed,

when the surface was abraded by #0000 steel wool (load was 250 g/cm²) 10 times at the speed of 40mm/sec.

^b Saturated water absorption is defined by the equation. Sheet thickness : 1mm, Test condition : 7days / 40 C degree water

$$\text{Saturated water absorption} = \frac{\text{Increasing weight after the test under the described condition}}{\text{Material weight before the test}} \times 100$$

^c Change of the appearance after contact test

- Acetone, Methanol : 25°Cx24hrs
- Artificial sweat solution (Acidic (pH5.5) / Alkali (pH8.0)) : 45°C95RH%x96hrs
- Alkali aq. : Chlorine-based bleach (Kao Corporation) 20°Cx20min
 - △ Cracking or/and whitening
 - × Dissolution or/and decomposition

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The art of performing beauty

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

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Typical values should not be used for specification purpose.

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