

# ST-Professional Screens

## TABLE OF SPECIFICATIONS APPROXIMATE VALUE ~

TEST METHOD	ISO	NF	OTHERS	UNITS	Thick.	VALUE
					mm	
<b>GENERAL PROPERTIES</b>						
Water absorption, 24hrs.	R 62	T 51002	DIN 53495	%	4	0,30
Water absorption, 8 days	R 62	T 51002	DIN 53495	%	4	0,50
Water absorption, max. (Total immersion, 1200 hrs.)			internal	%	3	1,75
Density	R1183	T 51063	DIN 53479			1,19
<b>MECHANICAL PROPERTIES</b>						
Poisson ratio to 20° C						0,39
Tensile strength to 23° C	R 527	T 51034	DIN 53455			
Stress at break	-2/1A/5			MPa	4	76
Modulus of elasticity				MPa	4	3300
Elongation at break				%	4	6
Flexural strength to 23°C	178	T 51001	DIN 53452			
Stress at break				MPa	4	130
Modulus of elasticity				MPa	4	3250
Charpy impact strength (un-notched)	179/2D	T 51035	DIN 53453	KJ/qm	4	12
Izod impact strength (notched)	R 180/1A		ASTM D256A	KJ/qm	4	1,4
Hardness Rockwell Scale M	D 2039		ASTM D 785			100
Compressive strength	R 684	T 51101	DIN 53454	MPa	4	130
<b>OPTICAL PROPERTIES</b>						
Refractive index	T 51064	DIN 53491				1,492
<b>ELECTRICAL PROPERTIES</b>						
Dielectric strength		C 26225	DIN 53481	KV/mm		20 bis 25
Transverse resistivity		C 26215	DIN 53482	Ohm.cm		>10 <sup>15</sup>
Dielectric constant		C 26230	DIN 53483			
to 50 Hz						3,7
to 1 MHz						2,6
<b>THERMAL PROPERTIES</b>						
Coefficient of linear expansion	EN2155	T51251	DIN 52328	mm/m/°C		0,065
Thermal conductivity			DIN 52612	W/m/°C		0,17
Max. continuous service temperature				°C		85
Max. linear shrinkage after heating				%		2
<b>FLAMMABILITY</b>						
Self-ignition temperature				°C		~ 450
Flame resistance (Radiant heat source)		P92501			3	M4
Melt behaviour when burning		P92505			3	non-drip
Flame resistance			DIN 4102		B2	B2
Flame resistance			BS476 Part7		class 3	class 4
Flame resistance			UL 94		HB	HB

With the burn no toxic or corrosive product is set free.

The coefficient of expansion is approx. 10 times more largely than that of the metal used for framing.

The specified standards do not correspond themselves all exactly. The indicated values are approx. values and without guarantee.