

# **Technical Data Sheet**

### Ultralite Fire retardant Polycarbonate sheet



#### **Ultra**Lite®

# Fire retardant polycarbonate sheets

UltraLite® Fire retardant sheets are polycarbonate sheets offering you high impact resistance and having excellent fire rating. They are UL94-V0 rated of 3.0 mm thickness.

UltraLite® Fire retardant sheets offer you both choices UV and GP sheets.

# **Applications:**

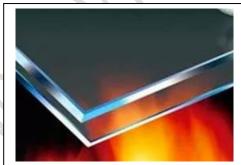
- · Lighting fixtures
- For both indoor and outdoor usage
- · Electro technical components and guards which have to comply with UL94
- Any application where improved fire behavior is needed for fire safe solutions

#### **Benefits:**

- High impact resistance
- Excellent flammability performance
- · High optical quality
- Excellent formability



Available Width:- 1220 mm and 2100 mm



Property	Test conditions	Typical Values	Unit	Test Method
	Physical		<u> </u>	
Density		1.2	kg/cm3	ISO 1183-1
Moisture absorption (equilibrium )	23°C/50%RH((equilibrium)	0.12	%	ISO 62
Moisture absorption (saturion)	Water at23°C(saturation)	0.30	%	ISO 62
Refractive Index		1.58	-	ISO 489
	Mechanical			
Tensile Modulus	1mm/min	2350	MPa	ISO 527-1,-2
Yield stress	50mm/min	65	%	ISO 527-1,-2
Yield strain	50mm/min	6.3	%	ISO 527-1,-2
Nominal strain at break	50mm/min	>50	%	ISO 527-1,-2
Flexural Modulus	2mm/min	2350	MPa	ISO 178
Flexural strength	2mm/min	96	MPa	ISO 178
Charpy impact strength	23°c, unnotched	No break	KJ/m <sup>2</sup>	ISO 179-1eu
Charpy impact strength	23°c, 3 mm,notched	80P	KJ/m <sup>2</sup>	ISO 179-1eu
Izod impact strength	23°c,3.2 mm, notched	70P	KJ/m <sup>2</sup>	ISO 180-A
Thermal				
Vicat softening temperature	50N,50°C/h	148	°C	ISO 306
Thermal conductivity	23°c	0.20	W/(m.K)	ISO 8302
Coefficient of linear thermal expansion	23-55°c	0.65	10 <sup>-4</sup> /K	ISO 11359-1,-2
Temperature of deflection under load	1.8 Mpa	128	°C	ISO75-1,-2
Temperature of deflection under load	0.45 Mpa	141	°C	ISO75-1,-2
Fire resistance	·	V0		UL-94

<sup>\*</sup>The mechanical properties were measured on sheets of 4mm or 3mm thickness.\*

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