

## Typical Physical Properties

### Extruded Acrylic

Property	Test Method	Conditions	Units	Value	
				Extruded	IM30
<b>Physical</b>					
Relative Density	ISO 1183		g/cm <sup>3</sup>	1.2	1.19
Water Absorption	ISO 62		%	0.2	0.3
<b>Mechanical</b>					
Tensile Strength at yield	ISO 527	5mm/min	Mpa	70	60
Tensile Strength at break					
Elongation at yield					
Elongation at break	ISO 527	5mm/min	%	4	12
Tensile Modulus of Elasticity					
Flexural Modulus	ISO 178	2mm/min	MPa	3030	2250
Izod Impact Strength	ISO 180/1A	notched	kJm-2	N/A	4
	ISO 179	unnotched	kJm-2	10	48
	ISO 179	notched	kJm-2	N/A	4.8
Impact Falling Weight					
Rockwell Hardness	ISO 2039-2		M Scale	101	77
<b>Thermal</b>					
Service Temperature			°C	-40 to 80	
Heat Distortion Temperature					
Vicat Softening Temperature	ISO 136		°C	>105	102
Coefficient of Thermal Expansion	ASTM D-696		mm/m°C	0.078	
	ISO 11359		1/°C	7.00E-05	
Thermal Conductivity					
Specific Heat Capacity					
<b>Optical</b>					
Light Transmission	ASTM D-1003	3mm sheet	%	>92	92
Refraction Index	ISO 489/A			1.49	1.49
Yellowness Index					
Haze					
<b>Electrical</b>					
Dielectric Strength	IEC 243		kV/nm-1		
Surface Resistivity	IEC 93		Ω m-2	>10 14	

### Flammability

Standard	Classification
BS 476 Part 7	Class 4
UL 94	HB
NEP 92-307	M4 (without drips)

Acrylic is a combustible material and if ignited will continue to burn. Different to cast, extruded acrylic will eventually produce molten droplets which will continue to burn.