

Acrylic Polymer Lucite® Diakon® CMH454L

PROPERTY	TEST METHOD	UNITS	VALUE
THERMAL			
Melt Flow Index	ISO 1133	gms/10mins	1.0
Vicat Softening Point	ISO 306A	°C	117
	ISO 306B	°C	109
Heat Deflection Temperature	ISO 75A	°C	102
	ISO 75B	°C	106
Coefficient of Expansion	ASTM E831	cm/cm/°C x 10 ⁻⁵	7.1
OPTICAL (2mm)			
Light Transmission	ASTM D1003	%	92
Haze	ASTM D1003	%	0.4
Refractive Index	ISO 489	-	1.49
MECHANICAL			
Tensile Strength	ISO 527	MPa	85
Elongation Flexural	ISO 527	% GPa	5
Modulus Flexural	ISO 178	MPa	3.4
Strength	ISO 178	kJ/m ²	120
Izod Impact Strength	ISO 180/1A	kJ/m ²	2.1
Charpy Impact Strength	ISO 179/1eA	kJ/m ²	2.2
	ISO 179/1eU		23
GENERAL			
Relative Density	ISO 1183	-	1.18
Rockwell Hardness	ISO 2039-2	M Scale	99
Ball Indentation hardness	ISO 2039-1 (H 961/30)	MPa	190
	-	%	0.4-0.7
Mould Shrinkage Water	ISO 62	%	0.30
Absorption Flammability	UL94	-	HB
Glow Wire Test	IEC 695-2-1	°C	650

The above data represents typical results obtained using standard test pieces, it should not form the basis of specifications. Information contained in this publication (and otherwise supplied to users) is based on our general experience and is given in good faith, but we are unable to guarantee its accuracy or to accept responsibility in respect of factors outside our knowledge or control. Freedom under patent, copyright and registered designs cannot be assumed.

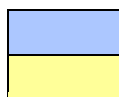
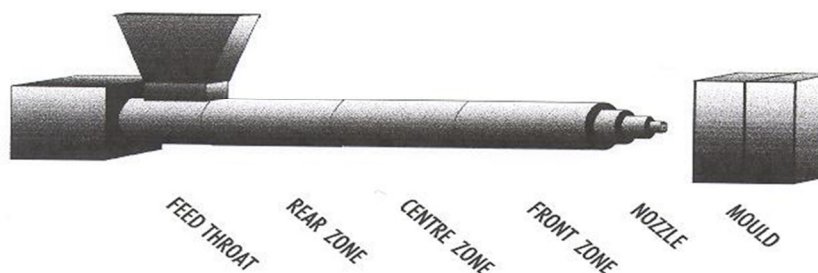
Users of Lucite Diakon polymer should consult the relevant Material Safety Data Sheet.

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Suggested temperature profile for Injection Moulding Lucite® Diakon® CMH454L

°C	FEED THROAT	REAR ZONE	CENTRE ZONE	FRONT ZONE	NOZZLE	MOULD
300						
290						
280						
270						
260						
250						
240						
230						
220						
210						
200						
190						
180						
170						
160						
150						
100						
90						
80						
70						
60						
50						
40						



Suggested moulding temperature limits
 Average moulding conditions

Drying Conditions

The material should be dried in either an air circulating oven, a continuous hot air dryer or ideally a dehumidified air dryer at 80°C for 3 to 4 hours.

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