

**Diakon ST45G8**

PMMA

Lucite International

<b>Processing/Physical Characteristics</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
<b>ISO Data</b>			
Melt flow index, MFI	<b>1.3</b>	g/10min	ISO 1133
Molding shrinkage, parallel	<b>0.4</b>	%	ISO 294-4, 2577
Molding shrinkage, normal	<b>0.8</b>	%	ISO 294-4, 2577
<b>Mechanical properties</b>			
<b>ISO Data</b>			
Tensile Strength	<b>45</b>	MPa	ISO 527
Strain at break	<b>35</b>	%	ISO 527
Flexural modulus, 23°C	<b>1700</b>	MPa	ISO 178
Charpy impact strength, +23°C	<b>78</b>	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength, +23°C	<b>8</b>	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C	<b>7.5</b>	kJ/m <sup>2</sup>	ISO 180/1A
Rockwell hardness	<b>M 35</b>	-	ISO 2039-2
<b>Thermal properties</b>			
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	<b>92</b>	°C	ISO 75-1/-2
Vicat softening temperature, A	<b>108</b>	°C	ISO 306
Vicat softening temperature, B	<b>93</b>	°C	ISO 306
Burning behav. at thickness h	<b>HB</b>	class	IEC 60695-11-10
<b>ASTM Data</b>			
Coefficient of Thermal Expansion, MD	<b>120</b>	E-6/K	ASTM D 696
<b>Optical properties</b>			
<b>ASTM Data</b>			
Haze	<b>3</b>	%	ASTM D 1003
Light Transmittance	<b>90</b>	%	ASTM D 1003
Index of Refraction	<b>1.49</b>	-	ASTM D 542
<b>Other properties</b>			
Water absorption	<b>0.36</b>	%	Sim. to ISO 62
Density	<b>1150</b>	kg/m <sup>3</sup>	ISO 1183
Density	<b>1150</b>	kg/m <sup>3</sup>	ASTM D 792

**Characteristics****Processing**

Injection Molding, Other Extrusion

**Special Characteristics**

High impact or impact modified

**Regional Availability**

North America, Europe, Asia Pacific, South and Central America, Near East/Africa