

# Altuglas® Diffuse 502 – Preliminary Technical Data Sheet

April 2014

## Technical Specifications

	CONDITIONS	TEST METHOD	UNIT	VALUE
<b>1 - GENERAL CHARACTERISTICS</b>				
Density	23°C	ISO 1183	g/cm <sup>3</sup>	1,15
Water absorption (24H)	23°C / 50% HR	ISO 62	%	0,3
Mould shrinkage		ASTM D-955	%	0,2-0,6
<b>2 - RHEOLOGICAL PROPERTIES</b>				
Melt Flow Index	230°C / 3,8kg	ISO 1133	g/10mn	3,2
<b>3 - MECHANICAL PROPERTIES</b>				
Tensile Strength at Yield	23°C	ISO 527-2	MPa	70
Elongation at Yield	23°C	ISO 527-2	%	4
Tensile Strength at break	23°C	ISO 527-2	MPa	70
Elongation at Break	23°C	ISO 527-2	%	4
Flexural Modulus	23°C	ISO 178	MPa	2600
Conventional Flexural Stress	23°C	ISO 178	MPa	82
Impact Resistance (Charpy, Unnotched)	23°C	ISO 179-1eU	KJ/m <sup>2</sup>	20
Impact Resistance (Charpy, Notched)	23°C	ISO 179-1eA	KJ/m <sup>2</sup>	1,2
Impact resistance (Izod, Notched)	23°C	ISO 180	KJ/m <sup>2</sup>	1,7
Rockwell Hardness	23°C	ASTM D-785	HRM	93
<b>4 - OPTICAL PROPERTIES</b>				
Light transmission	23°C / 2mm thick	ASTM D1003	%	76
Haze	23°C / 2mm thick	ASTM D1003	%	100
Relative Diffusing Power (1 inches)	23°C / 2mm thick	Internal	%	71
Relative Diffusing Power (2 inches)	23°C / 2mm thick	Internal	%	89
<b>5 - THERMAL PROPERTIES</b>				
Vicat Softening Temperature	B 50 N	ISO 306	°C	101
HDT (annealed 60°C/16h)	1,82 Mpa	ISO 75-2	°C	92
<b>6 - FLAMMABILITY</b>				
Glow wire resistance (thickness 2.05mm)		IEC 60695-2-12	°C	<700
Glow wire resistance (thickness 3,07mm)		IEC 60695-2-12	°C	>700
Fire Resistant		UL/94	CLASS	HB

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