



POLESTAR POLYMERS INDIA PVT. LTD.

An ISO 9001 : 2015 Certified Company

STELLO[®] M

Technical Data Sheet – Rods

(Ultra High Molecular Weight Polyethylene)

Properties	Test Method	Unit	Value
Density	ISO 1183	g/m ³	0.93
Water absorption	DIN EN ISO 62	%	<0,01
Flammability (Thickness 3 mm / 6 mm)	UL 94		HB
Average molecular weight	Margolies, Equation	10 ⁶ g/mol	~ 7
Charpy double 14 ⁰ v-notch strength, 23 ⁰ C	ISO 11542-2	Kj/m ²	210
Tensile modulus	ISO 527-2/1B	MPa	640
Tensile stress at yield	ISO 527-2/1B	MPa	19
Tensile nominal strain at break	ISO 527-2/1B	%	440
Shore D hardness, 15s	ISO 868	-	60
Vicat softening temperature, 50 ⁰ C/h 50N	ISO 306	⁰ C	80
Service temperature , long term	Average	⁰ C	-150...80
Service temperature, short term (max.)	Average	⁰ C	120
Volume resistivity	IEC 60093	Ohm*m	>1E12
Surface resistivity	IEC 60093	Ohm	>1E12

Note: The information contained herein are typical values intended for reference and comparison purposes only. They should not be used as a basis for design specifications or quality control. POLESTAR POLYMERS INDIA PVT. LTD. will not provide any legally binding guarantee of certain properties or any suitability.