



Info@biosphereplastic.com

PH: 503-530-8674

<http://www.biosphereplastic.com>

TECHNICAL DATA SHEET 201: Confidential

- Translucent, semi-crystalline structure
- High melt strength: MVR (190 °C, 2.16 kg): < 2.0 ml/10 min.
MVR (190 °C, 5 kg): < 7.5 ml/10 min.
- Good thermo stability up to >290 °C
- Weldable and printable in 8 colors by flexo printing

BioSphere is the only additive that complies with European food stuff legislation for food contact, EU Directive 2002/72/EC (as amended) and US food contact notification for the main components: eg. FCN # upon request. Specific limitations and more details are given on request.

BioSphere is produced as a standard material in a continuous production process according to DIN EN ISO 9001: 2000. The melt volume rate, MVR, at 190 °C, 5 kg, according to ISO 1133 has been defined as specified parameter for quality control. A certificate of the MVR value can be provided with each lot number (20 t) upon request.



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Property	Unit	Test Method	<i>BioSphere</i>
Mass density	g/cm ³	ISO 1183	1.24 – 1.26
Melt flow rate MFR 190 °C, 2.16 kg	g/10 min. ml/10	ISO 1133	< 2
Melt volume rate MVR 190 °C, 5 kg	min.	ISO 1133	3.5 – 7.5
Melting points	°C °C	DSC DSC	110 – 120 140 – 155
Shore D hardness	-	ISO 868	59
Vicat VST A/50	°C	ISO 306	70



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Property	Unit	Test Method	BioSphere
Transmission	%	ASTM D 1003	85
Tensile modulus	MPa	ISO 527	840/280
Tensile strength	MPa	ISO 527	39/30
Ultimate strength	MPa	ISO 527	39/29
Ultimate Elongation	%	ISO 527	330/430
Failure Energy (Dyna Test)	J/mm	DIN 53373	42
Permeation rates: Oxygen	cm ³ /(m ² *d*bar)	ASTM D 3985	670
Water vapour	g/(m ² *d)	ASTM F 1249	84

The information submitted in this document is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors of the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance for a special purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.