BIOTEC

Last Updated May 24, 2023

Contents

BIOTEC Biologische Naturverpackungen GmbH & Co. KG · Werner-Heisenberg-Str. 32 · D.46446 Emmerich **T** +49 2822 92510 **W** biotec.de

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Last Updated May 24, 2023

Preliminary Data Sheed
BIOPLAST 800

Properties				
Parameters	**Target Value**	**Unit**	**Descriptions**	**Standart**
Material Density	2	g/cm³	EN ISO 1183	r
MFR (160°C, 5 kg)	5.2	g/10 min	EN ISO 1133 (160 °C, 5 kg)	
MFR (190°C, 5 kg)	11	g/10 min	EN ISO 1133 (190 °C, 5 kg)	
Moisture Content	< 0,15	weight %	Biotec test directive based on EN ISO 15512	
Biobased carbon share	> 60	%	ASTM D6866 or ISO 16620-2 (TC)	

Mechanical Properties					
Parameters	**Target Value**	**Unit**	**Parameters**	**Target Value**	**Unit**
Strain at strength	2	%	Charpy impact strength average	2	kJ/m^2
Thickness	245	μm	Flexural modulus	7441	MPa
Tear resistance	1501	mN	Flexural stress at break	76	MPa
Tear resistance	153	g	Flexural strain at break	2	%
Tear resistance	1	g/μm	Flexural stress at conventional deflection	6	MPa
Tear resistance	6	KJ/m²	Flexural strength	77	MPa
Oblique tear	0	%	Flexural strain at flexural strength	2	%
Thickness	245	μm	Tensile modulus	6271	MPa
Tear resistance	1610	mN	Stress at yield	n/a	MPa
Tear resistance	164	g	Strain at yield	n/a	%
Tear resistance	1	g/μm	Stress at break	47	MPa
Tear resistance	7	KJ/m²	Nominal strain at break	n/a	%
Oblique tear	0	%	Strain at break	2	%
autre	d	autre	Strength	47	MPa
Heat deflection temperature (HDT)	65	°C			

Compostable Certification			
Certification	**Target Value**	**Unit**	**Standart**
OK Compost INDUSTRIAL	275	μm	EN 13432
OK compost HOME	n/a	μm	Certification program of TUV Austria

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Preliminary Data Sheed
BIOPLAST 105

Properties

Parameters	Target Value	Unit	Descriptions	Standart
Material Density	n/a	g/cm³	EN ISO 1183	r
MFR (160°C, 2.16 kg)		g/10 min	EN ISO 1133 (160 °C, 2.16 kg)	
MFR (190°C, 2.16 kg)	4.1	g/10 min	EN ISO 1133 (190 °C, 2.16 kg)	
Moisture Content	< 0,2	weight %	Biotec test directive based on EN ISO 15512	
Biobased carbon share	67	%	ASTM D6866 or ISO 16620-2 (TC)	

Mechanical Properties

Parameters	Target Value	Unit
Strain at strength	n/a	%
Thickness	n/a	μm
Tear resistance	n/a	mN
Tear resistance	n/a	g
Tear resistance	n/a	g/μm
Tear resistance	n/a	KJ/m²
Oblique tear	n/a	%
Thickness	n/a	μm
Tear resistance	n/a	mN
Tear resistance	n/a	g
Tear resistance	n/a	g/μm
Tear resistance	n/a	KJ/m²
Oblique tear	n/a	%
autre	d	autre
Heat deflection temperature (HDT)	n/a	°C

Parameters	Target Value	Unit
Charpy impact strength average	n/a	kJ/m^2
Flexural modulus	n/a	MPa
Flexural stress at break	n/a	MPa
Flexural strain at break	n/a	%
Flexural stress at conventional deflection	n/a	MPa
Flexural strength	n/a	MPa
Flexural strain at flexural strength	n/a	%
Tensile modulus	n/a	MPa
Stress at yield	n/a	MPa
Strain at yield	n/a	%
Stress at break	n/a	MPa
Nominal strain at break	n/a	%
Strain at break	n/a	%
Strength	n/a	MPa

Compostable Certification

Certification	Target Value	Unit	Standart
OK Compost INDUSTRIAL	100	μm	EN 13432
OK compost HOME	n/a	μm	Certification program of TUV Austria

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Preliminary Data Sheed
BIOPLAST GS 2189

Properties

Parameters	Target Value	Unit	Descriptions	Standart
Material Density	1.36	g/cm³	EN ISO 1183	r
MFR (190°C, 2.16 kg)	29	g/10 min	EN ISO 1133 (190 °C, 2.16 kg)	
Moisture Content	< 0,15	weight %	Biotec test directive based on EN ISO 15512	
Biobased carbon share	69	%	ASTM D6866 or ISO 16620-2 (TC)	

Mechanical Properties

Parameters	Target Value	Unit
Strain at strength	2	%
Thickness	260	μm
Tear resistance	5297	mN
Tear resistance	540	g
Tear resistance	2	g/μm
Tear resistance	20	KJ/m²
Oblique tear	0	%
Thickness	268	μm
Tear resistance	2723	mN
Tear resistance	278	g
Tear resistance	1	g/μm
Tear resistance	10	KJ/m²
Oblique tear	0	%
autre	d	autre
Heat deflection temperature (HDT)	53	°C

Parameters	Target Value	Unit
Charpy impact strength average	4	kJ/m^2
Flexural modulus	2417	MPa
Flexural stress at break	n/a	MPa
Flexural strain at break	n/a	%
Flexural stress at conventional deflection	62	MPa
Flexural strength	64	MPa
Flexural strain at flexural strength	4	%
Tensile modulus	2332	MPa
Stress at yield	41	MPa
Strain at yield	2	%
Stress at break	31	MPa
Nominal strain at break	7	%
Strain at break	n/a	%
Strength	41	MPa

Compostable Certification

Certification	Target Value	Unit	Standart
OK Compost INDUSTRIAL	418	μm	EN 13432
OK compost HOME	n/a	μm	Certification program of TUV Austria

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