

# Arnitel<sup>®</sup> ID 2045

## TPC

>50% Renewable Content, 3D printing

To: Nexeo solutions 3D

Print Date: 2016-09-07

*The mechanical data is tested on printed tensile bars, printed in two directions: 0°-90° and 45°-45°*

Properties	Typical Data	Unit	Test Method
<b>Thermal properties</b>			
Melting temperature (10° C/min)	158	°C	ISO 11357-1/-3
Glass transition temperature (10° C/min)	-35	°C	ISO 11357-1/-2
Vicat softening temperature (50° C/h 10N)	90	°C	ISO 306
<b>Electrical properties</b>			
Volume resistivity	>1E13	Ohm*m	IEC 60093
Electric strength	20	kV/mm	IEC 60243-1
<b>Other properties</b>			
Humidity absorption	0.04	%	Sim. to ISO 62
Density	1100	kg/m <sup>3</sup>	ISO 1183
Biobased content	52	% (Bio C/Total C)	ASTM D6866-12 Method B
<b>Material specific properties</b>			
Tensile modulus (3D printed tensile bars) 0°-90°	29	MPa	ISO 527-1/-2
Tensile modulus (3D printed tensile bars) 45°-45°	29	MPa	ISO 527-1/-2
Maximum tensile stress (3D printed tensile bars) 0°-90°	8	MPa	ISO 527-1/-2
Maximum tensile stress (3D printed tensile bars) 45°-45°	7.6	MPa	ISO 527-1/-2
Elongation at break (3D printed tensile bars) 0°-90°	350	%	ISO 527-1/-2
Elongation at break (3D printed tensile bars) 45°-45°	390	%	ISO 527-1/-2

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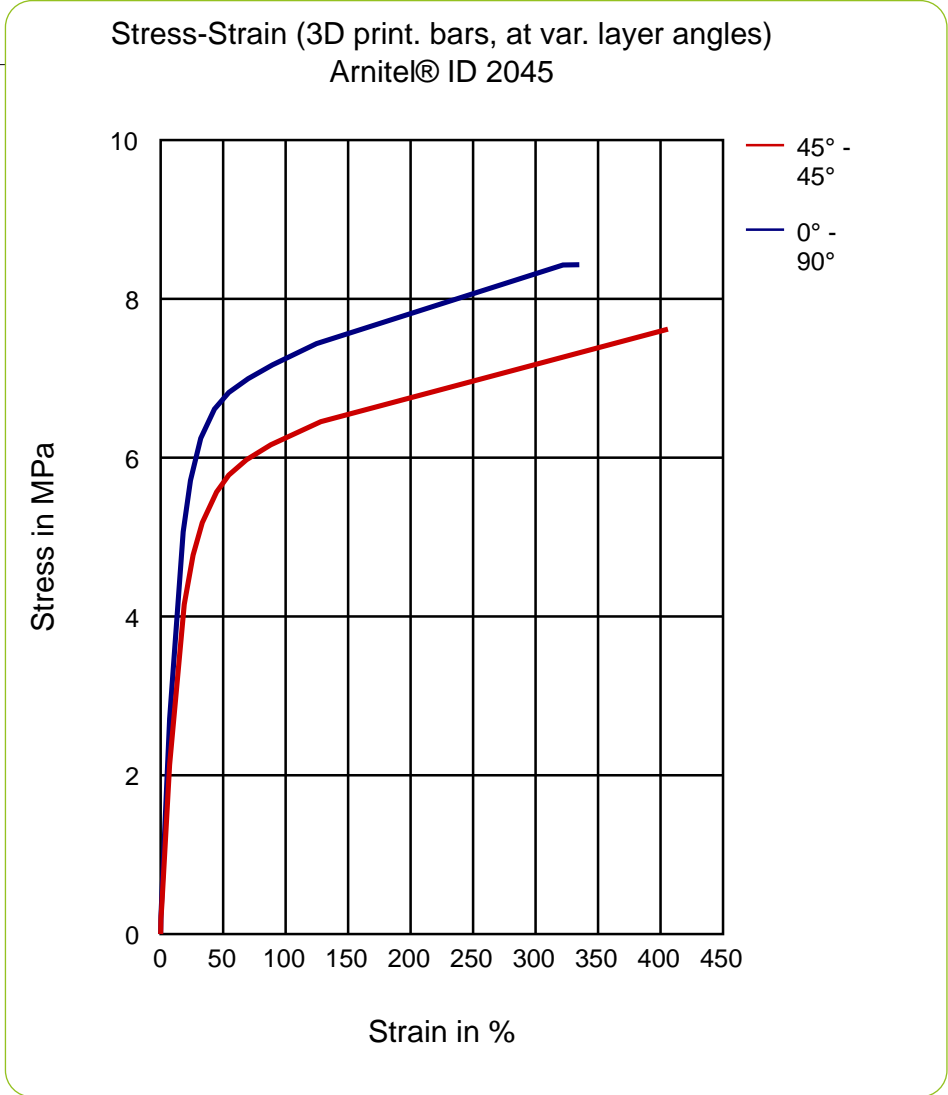


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Properties	Typical Data	Unit	Test Method
Mechanical properties (TPE)			
Shore D Hardness (3s)	34	-	ISO 868

## Stress-Strain (3D print. bars, at var. layer angles)



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