

# Arnitel<sup>®</sup> UM551

## TPC-ES

Print Date: 2024-09-17

Due to limited hydrolysis resistance, this material should only be used in dry environments.

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
<b>RHEOLOGICAL PROPERTIES</b>		<b>VALUE</b>	
Melt volume-flow rate	13.8	cm <sup>3</sup> /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Melt flow index MFI	14	g/10min	ISO 1133
MFI test load	2.16	kg	ISO 1133
MFI test temperature	230	°C	ISO 1133
Molding shrinkage (parallel)	1.45	%	ISO 294-4
Molding shrinkage (normal)	1.35	%	ISO 294-4
<b>MECHANICAL PROPERTIES</b>		<b>VALUE</b>	
Shore D Hardness (3s)	55	–	ISO 868
Shore D Hardness (15s)	55	–	ISO 868
Tensile modulus	158	MPa	ISO 527-1/-2
Yield stress	15	MPa	ISO 527-1/-2
Yield strain	22	%	ISO 527-1/-2
Stress at break	36	MPa	ISO 527-1/-2
Nominal strain at break	656	%	ISO 527-1/-2
Stress at 10% strain	10.8	MPa	ISO 527-1/-2
Stress at 50% strain	14.3	MPa	ISO 527-1/-2
Stress at 100% strain	14.1	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	N	kJ/m <sup>2</sup>	ISO 179/1eA

All the trademarks mentioned here are trademarks of Envalior.

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.

Seller is not responsible or liable for the design of the products of the Customer and it is the responsibility of the Customer to determine that the Seller's product is safe, complies with application laws and regulations, and is technically or otherwise fit for its intended use. Seller does not endorse or claim suitability of its products for a specific application and disclaims each and every representation or warranty, whether express or implied, in that respect.

Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values.

Copyright © Envalior 2024. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of Envalior.

## Property Data

# Arnitel<sup>®</sup> UM551

Print Date: 2024-09-17

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Charpy notched impact strength (-30°C)	6	kJ/m <sup>2</sup>	ISO 179/1eA
Tear strength	165	kN/m	ISO 34-1; Method B
<b>THERMAL PROPERTIES</b>			
	<b>VALUE</b>		
Melting temperature (10°C/min)	200	°C	ISO 11357-1/-3
Temp. of deflection under load (0.45 MPa)	80	°C	ISO 75-1/-2
Vicat softening temperature (50°C/h 50N)	85	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	1.6	E-4/°C	ISO 11359-1/-2
Burning Behav. at 0.75 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	0.75	mm	IEC 60695-11-10
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
Burning Behav. at 3.0 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	3	mm	IEC 60695-11-10
<b>ELECTRICAL PROPERTIES</b>			
	<b>VALUE</b>		
Comparative tracking index	600	V	IEC 60112
<b>OTHER PROPERTIES</b>			
	<b>VALUE</b>		
Density	1260	kg/m <sup>3</sup>	ISO 1183
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.25	%	Sim. to ISO 62

All the trademarks mentioned here are trademarks of Envalior.

Seller represents and warrants exclusively that on the date of delivery by Seller the product shall be in conformity with the specifications agreed upon. Seller makes no other representations or warranties, whether express or implied.

Seller is not responsible or liable for the design of the products of the Customer and it is the responsibility of the Customer to determine that the Seller's product is safe, complies with application laws and regulations, and is technically or otherwise fit for its intended use. Seller does not endorse or claim suitability of its products for a specific application and disclaims each and every representation or warranty, whether express or implied, in that respect.

Typical values are indicative only and are not to be construed as being binding specifications. Colorants in the product or other additives may cause significant variations in typical values.

Copyright © Envalior 2024. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of Envalior.