

# Arnitel<sup>®</sup> EL630

## TPC-ET

Injection Molding, Food Contact Quality

Print Date: 2024-03-27

PROPERTIES	TYPICAL DATA	UNIT	TEST METHOD
<b>RHEOLOGICAL PROPERTIES</b>			
	VALUE		
Melt volume-flow rate	28	cm <sup>3</sup> /10min	ISO 1133
Temperature	230	°C	ISO 1133
Load	2.16	kg	ISO 1133
Molding shrinkage [parallel]	1.75	%	Sim. to ISO 294-4
Molding shrinkage [normal]	2	%	Sim. to ISO 294-4

<b>MECHANICAL PROPERTIES</b>			
	VALUE		
Shore D Hardness (3s)	59	—	ISO 868
Tensile modulus	300	MPa	ISO 527-1/-2
Stress at break	35	MPa	ISO 527-1/-2
Nominal strain at break	490	%	ISO 527-1/-2
Stress at 5% strain	12	MPa	ISO 527-1/-2
Stress at 10% strain	17	MPa	ISO 527-1/-2
Stress at 50% strain	18	MPa	ISO 527-1/-2
Stress at 100% strain	18	MPa	ISO 527-1/-2
Charpy notched impact strength (+23°C)	N	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	12	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength (+23°C)	N	kJ/m <sup>2</sup>	ISO 180/1A
Flexural modulus	330	MPa	ISO 178
Compression Set under constant strain at 70 °C	43	%	ISO 815

### MECHANICAL PROPERTIES (DIE CUTTING) VALUE

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> EL630

Print Date: 2024-03-27

<i>PROPERTIES</i>	<i>TYPICAL DATA</i>	<i>UNIT</i>	<i>TEST METHOD</i>
Stress at break (normal)	43	MPa	ISO 527-1/-2
Tear strength (normal)	163	kN/m	ISO 34-1; Method B
Tear strength (parallel)	161	kN/m	ISO 34-1; Method B
Strain at break (normal)	740	%	ISO 527-1/-2
<b><i>THERMAL PROPERTIES</i></b>			
	<b><i>VALUE</i></b>		
Melting temperature (10°C/min)	212	°C	ISO 11357-1/-3
Temp. of deflection under load (0.45 MPa)	115	°C	ISO 75-1/-2
Vicat softening temperature (50°C/h 50N)	125	°C	ISO 306
Coeff. of linear therm. expansion (parallel)	1.85	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	1.85	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	IEC 60695-11-10
<b><i>ELECTRICAL PROPERTIES</i></b>			
	<b><i>VALUE</i></b>		
Relative permittivity (100Hz)	3.8	-	IEC 62631-2-1
Relative permittivity (1 MHz)	3.4	-	IEC 62631-2-1
Dissipation factor (100 Hz)	110	E-4	IEC 62631-2-1
Dissipation factor (1 MHz)	340	E-4	IEC 62631-2-1
Volume resistivity	1E12	Ohm*m	IEC 62631-3-1
Electric strength	22	kV/mm	IEC 60243-1
Comparative tracking index	600	V	IEC 60112
<b><i>OTHER PROPERTIES</i></b>			
	<b><i>VALUE</i></b>		
Density	1240	kg/m <sup>3</sup>	ISO 1183
Apparent density	770	kg/m <sup>3</sup>	ISO 60
Water absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.2	%	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.