

Arnitel[®] UM551

TPC-ES

Print Date: 2024-03-27

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

| PROPERTIES | TYPICAL DATA | UNIT | TEST METHOD |
|--|--------------|------------------------|--------------|
| RHEOLOGICAL PROPERTIES | | VALUE | |
| Melt volume-flow rate | 13.8 | cm ³ /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 |
| MECHANICAL PROPERTIES | | VALUE | |
| 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 ² | 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[®] UM551

Print Date: 2024-03-27

| <i>PROPERTIES</i> | <i>TYPICAL DATA</i> | <i>UNIT</i> | <i>TEST METHOD</i> |
|--|---------------------|-------------------|--------------------|
| Charpy notched impact strength (-30°C) | 6 | kJ/m ² | ISO 179/1eA |
| Tear strength | 165 | kN/m | ISO 34-1; Method B |

| <i>THERMAL PROPERTIES</i> | <i>VALUE</i> | | |
|--|--------------|--------|-----------------|
| 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 |

| <i>ELECTRICAL PROPERTIES</i> | <i>VALUE</i> | | |
|------------------------------|--------------|---|-----------|
| Comparative tracking index | 600 | V | IEC 60112 |

| <i>OTHER PROPERTIES</i> | <i>VALUE</i> | | |
|-------------------------|--------------|-------------------|----------------|
| Density | 1260 | kg/m ³ | 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.