

# Arnitel® UM552

## TPC-ES

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

| Properties                                   | Typical Data | Unit              | Test Method        |
|----------------------------------------------|--------------|-------------------|--------------------|
| <b>Rheological properties</b>                |              |                   |                    |
|                                              | Value        |                   |                    |
| Melt flow index MFI                          | 9.5          | g/10min           | ISO 1133           |
| MFI test load                                | 2.16         | kg                | ISO 1133           |
| MFI test temperature                         | 230          | °C                | ISO 1133           |
| <b>Mechanical properties</b>                 |              |                   |                    |
|                                              | Value        |                   |                    |
| Shore D Hardness (15s)                       | 55           | -                 | ISO 868            |
| Tensile modulus                              | 250          | MPa               | ISO 527-1/-2       |
| Yield stress                                 | 15           | MPa               | ISO 527-1/-2       |
| Yield strain                                 | 23           | %                 | 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)       | 6            | kJ/m <sup>2</sup> | ISO 179/1eA        |
| Tear strength                                | 165          | kN/m              | ISO 34-1; Method B |
| <b>Thermal properties</b>                    |              |                   |                    |
|                                              | Value        |                   |                    |
| Melting temperature (10°C/min)               | 195          | °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    |



## Property Data

# Arnitel<sup>®</sup> UM552

| Properties                            | Typical Data | Unit              | Test Method     |
|---------------------------------------|--------------|-------------------|-----------------|
| 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  |

