

# Arnitel<sup>®</sup> EM400-08

## TPC-ET

Food Contact Quality, Injection Molding or Extrusion Grade

| PROPERTIES                             | TYPICAL DATA | UNIT              | TEST METHOD       |
|----------------------------------------|--------------|-------------------|-------------------|
| <b>RHEOLOGICAL PROPERTIES</b>          |              | VALUE             |                   |
| Melt flow index MFI                    | 32           | g/10min           | ISO 1133          |
| MFI test load                          | 2.16         | kg                | ISO 1133          |
| MFI test temperature                   | 230          | °C                | ISO 1133          |
| Molding shrinkage [parallel]           | 1.5          | %                 | Sim. to ISO 294-4 |
| Molding shrinkage [normal]             | 1.5          | %                 | Sim. to ISO 294-4 |
| <b>MECHANICAL PROPERTIES</b>           |              | VALUE             |                   |
| Shore D Hardness (15s)                 | 33           | —                 | ISO 868           |
| Tensile modulus                        | 40           | MPa               | ISO 527-1/-2      |
| Yield stress                           | 6            | MPa               | ISO 527-1/-2      |
| Yield strain                           | 50           | %                 | ISO 527-1/-2      |
| Stress at break                        | 20           | MPa               | ISO 527-1/-2      |
| Stress at 10% strain                   | 3            | MPa               | ISO 527-1/-2      |
| Stress at 100% strain                  | 6.6          | 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) | N            | kJ/m <sup>2</sup> | ISO 179/1eA       |
| Izod notched impact strength (+23°C)   | N            | kJ/m <sup>2</sup> | ISO 180/1A        |
| Izod notched impact strength (-20°C)   | N            | kJ/m <sup>2</sup> | ISO 180/1A        |
| <b>THERMAL PROPERTIES</b>              |              | VALUE             |                   |
| Melting temperature (10°C/min)         | 195          | °C                | ISO 11357-1/-3    |
| <b>ELECTRICAL PROPERTIES</b>           |              | VALUE             |                   |



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|-------------------------------|--------------|-------|---------------|
| Relative permittivity (100Hz) | 4.1          | –     | IEC 62631–2–1 |
| Relative permittivity (1 MHz) | 4            | –     | IEC 62631–2–1 |
| Dissipation factor (100 Hz)   | 10           | E–4   | IEC 62631–2–1 |
| Dissipation factor (1 MHz)    | 170          | E–4   | IEC 62631–2–1 |
| Volume resistivity            | >1E13        | Ohm*m | IEC 62631–3–1 |
| Electric strength             | 20           | kV/mm | IEC 60243–1   |
|                               |              |       |               |
| OTHER PROPERTIES              | VALUE        |       |               |
| Density                       | 1110         | kg/m³ | ISO 1183      |

