# Makroblend® UT408

(PC+PET)-I — Covestro Deutschland AG

## Product Texts

- (PC+PET) blend, unreinforced
- impact modified
- high flow
- injection molding grade
- good impact strength
- dimensional stability and chemical resistance. Suitable for some food contact applications (contact Covestro for more information).

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Melt volume-flow rate, MVR | **20** | cm³/10min | ISO 1133 |
| Temperature | **270** | °C | - |
| Load | **5** | kg | - |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Tensile Modulus | **2400** | MPa | ISO 527 |
| [C] Yield stress | **59** | MPa | ISO 527 |
| [C] Yield strain | **5.5** | % | ISO 527 |
| [C] Nominal strain at break | **>50** | % | ISO 527 |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Temp. of deflection under load, 1.80 MPa | **109** | °C | ISO 75-1/-2 |
| [C] Temp. of deflection under load, 0.45 MPa | **131** | °C | ISO 75-1/-2 |
| [C] Coeff. of linear therm. expansion, parallel | **70** | E-6/K | ISO 11359-1/-2 |
| [C] Coeff. of linear therm. expansion, normal | **80** | E-6/K | ISO 11359-1/-2 |
| [C] Burning Behav. at 1.5 mm nom. thickn. | **HB** | class | IEC 60695-11-10 |

[C]: CAMPUS

| Electrical properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Relative permittivity, 100Hz | **3.2** | - | IEC 62631-2-1 |
| [C] Relative permittivity, 1MHz | **3.1** | - | IEC 62631-2-1 |
| [C] Dissipation factor, 100Hz | **13** | E-4 | IEC 62631-2-1 |
| [C] Dissipation factor, 1MHz | **140** | E-4 | IEC 62631-2-1 |
| [C] Volume resistivity | **>1E13** | Ohm*m | IEC 62631-3-1 |
| [C] Surface resistivity | **>1E15** | Ohm | IEC 62631-3-2 |
| [C] Electric strength | **34** | kV/mm | IEC 60243-1 |
| [C] Comparative tracking index | **375** | - | IEC 60112 |

[C]: CAMPUS

| Other properties | Value | Unit | Test Standard |
|---|---|---|---|
| [C] Water absorption | **0.5** | % | Sim. to ISO 62 |
| [C] Humidity absorption | **0.2** | % | Sim. to ISO 62 |
| [C] Density | **1220** | kg/m³ | ISO 1183 |

[C]: CAMPUS

| Test specimen production | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| [C] Injection Molding, melt temperature | **270** | °C | ISO 294 |
| Injection Molding, mold temperature | **70** | °C | ISO 294 |
| Injection Molding, injection velocity | **200** | mm/s | ISO 294 |

[C]: CAMPUS

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Pre-drying - Temperature | **110** | °C | - |
| Pre-drying - Time | **2 - 4** | h | - |
| Processing humidity | **≤0.01** | % | - |
| Melt temperature | **260 - 280** | °C | - |
| Mold temperature | **60 - 80** | °C | - |

## Characteristics

**Processing**
Injection Molding

**Delivery form**
Pellets

**Special Characteristics**
High impact or impact modified, U.V. stabilized or stable to weather

**Features**
Blending Resin

**Chemical Resistance**
General Chemical Resistance

**Certifications**
Food contact, Food approval FDA 21 CFR

**Regional Availability**
North America, Europe, Asia Pacific, South and Central America, Near East/Africa

## Other text information

**Injection molding**
PREPROCESSING
Max. Water content: 0.01 %
Drying temperature: 110 °C
Drying time:
Circulating air drying oven (50 % fresh air) 4-12 h
Fresh air dryer (high speed dryer) 2-4 h
Dry air dryer 2-4 h

PROCESSING
Melt temperature: 260-280 °C
Mold temperature: 60-80 °C

Use open nozzle.