



# PRELIMINARY DATA SHEET

## Witcom TPE-2012/355-EC, based on a Thermoplastic Elastomer (TPE)

electrically conductive, 70 Shore A

| Properties | Test method | Unit | TPE-2012/355-EC |
|------------|-------------|------|-----------------|
|------------|-------------|------|-----------------|

### **Physical properties**

|  |          |                   |       |
|--|----------|-------------------|-------|
| Specific gravity                       | ISO 1183 | g/cm <sup>3</sup> | 1,08  |
| Water absorption at saturation, 23 °C  | ISO 62   | %                 | 0,8   |
| Humidity absorption, 23 °C/50 % RH     | ISO 62   | %                 | 0,2   |
| Mould shrinkage (flow direction, 3 mm) | ISO 2577 | %                 | 1 - 2 |

### **Mechanical properties**

|                                 |             |                   |          |
|---------------------------------|-------------|-------------------|----------|
| Tensile strength (max.)         | ISO 527     | MPa               | 5        |
| Elongation at break             | ISO 527     | %                 | >500     |
| Flexural strength               | ISO 178     | MPa               | -        |
| Flexural modulus                | ISO 178     | GPa               | -        |
| IZOD impact strength, notched   | ISO 180/1eA | kJ/m <sup>2</sup> | no break |
| IZOD impact strength, unnotched | ISO 180/1eU | kJ/m <sup>2</sup> | no break |

### **Thermal properties**

|  |           |                      |   |
|--|-----------|----------------------|---|
| Heat distortion temperature (1,81 MPa)       | ISO 75    | °C                   | - |
| Relative temperature index, 3 mm with impact | UL 746B   | °C                   | - |
| Coefficient of linear thermal expansion      | ISO 11359 | K-1·10 <sup>-5</sup> | - |

### **Flammability**

|                   |          |   |             |
|-------------------|----------|---|-------------|
| Burning behaviour | ISO 1210 | - | HB @ 3,0 mm |
| UL recognition    | UL94     | - | -           |

### **Electrical properties**

|                            |             |      |                  |
|----------------------------|-------------|------|------------------|
| Surface resistivity        | ASTM D257   | Ω/sq | >10 <sup>3</sup> |
| Volume resistivity         | ASTM D257   | Ω·cm | -                |
| Comparative tracking index | IEC 60112   | V    | -                |
| Glow wire rating, 1,6 mm   | IEC 695-2-1 | °C   | -                |

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