

**TECHNICAL DATA SHEET**

# Thermoplastic Elastomer TPE

**General notes:**

- » **TPE** Olefinic Thermoplastic Elastomer, Permanent Antistatic
- » Soft Plastic, was developed in order to achieve a surface resistance  $10^8\text{-}10^9$  Ohm in order to minimize the possibility of charge generation by wearing

- » **ESD Protection**


**Soft plastic (TPE)**


Upper side

## Mechanical properties

|                    |                |                           |
|--------------------|----------------|---------------------------|
| Tensile strength   | <b>2 MPa</b>   | <i>ISO 527 ASTM D 638</i> |
| Tensile elongation | <b>10 +%</b>   | <i>ISO 527 ASTM D 638</i> |
| Hardness, Shore    | <b>65-75 A</b> | <i>D-785</i>              |

# Polypropylen compound PP

**General notes:**

- » **PP** polypropylene-compound
- » Hard Plastic, its function is to ground the metal tool (through the operators hand and the ESD wrist strap)

- » **ESD Protection**


**Hardplastic(PP)**


Bottom side

## Mechanical properties

|                                      |                 |                           |
|--------------------------------------|-----------------|---------------------------|
| Tensile strength at break (5mm/min)  | <b>20 MPa</b>   | <i>ISO 527 ASTM D 638</i> |
| Elongation at break (5mm/min)        | <b>&gt;10%</b>  | <i>ISO 527 ASTM D 638</i> |
| Tensile modulus +23°C                | <b>1650 MPa</b> | <i>ISO 527 ASTM D 638</i> |
| Tensile strength +23°C               | <b>190 MPa</b>  | <i>ISO 527 ASTM D 638</i> |
| Izod-Impact strength (notched) +23°C | <b>13 kJ/m</b>  | <i>ISO 179/2C</i>         |

## Thermal properties

|                                      |              |                          |
|--------------------------------------|--------------|--------------------------|
| Temp. of defl. under load (1.80 MPa) | <b>56 °C</b> | <i>ISO 75 ASTM D 648</i> |
| VICAT softening point B (49 N)       | <b>70 °C</b> | <i>ISO 306</i>           |

## Other properties

|         |                              |                 |
|---------|------------------------------|-----------------|
| Density | <b>0.97 g/cm<sup>3</sup></b> | <i>ISO 1183</i> |
|---------|------------------------------|-----------------|

This document contains information based on average values as obtained from the results of laboratory tests and observations made on the material. Ideal-tek SA declines all responsibility from an improper use of the product described in this document.