

## TECHNICAL SPECIFICATIONS



### Black ESD TWEEZERS & TWEEZERS TIPS

|                     |                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------|
| <b>Part Numbers</b> | All tweezers with ESD suffix<br>Valid for plastic tweezers and Quick Change replaceable tips |
| <b>Material</b>     | Polyamid 66 with carbon fiber, ESD, Black                                                    |

| Test                          | Norm                                         | Unit              | Value |
|-------------------------------|----------------------------------------------|-------------------|-------|
| Density                       | ISO 1183                                     | g/cm <sup>3</sup> | 1,28  |
| Tensile strength (at +23°)    | ISO 527                                      | MPa               | 210   |
| Tensile strength (at +60°)    | ISO 527                                      | MPa               | 159   |
| Tensile strength (at +90°)    | ISO 527                                      | MPa               | 134   |
| Tensile strength (at +120°)   | ISO 527                                      | MPa               | 117   |
| Elongation at break           | ISO 527                                      | %                 | 2,5   |
| Flexural Modulus (+23°)       | ASTM D790                                    | MPa               | 17000 |
| Flexural Modulus (at +60°)    | ASTM D790                                    | MPa               | 12000 |
| Flexural Modulus (at +90°)    | ASTM D790                                    | MPa               | 9800  |
| Flexural Modulus (at +120°)   | ASTM D790                                    | MPa               | 8000  |
| Heat distribution Temperature | ASTM D 648                                   | ° C               | 95°   |
| Melting point                 | ASTM D1525                                   | ° C               | >260° |
| Charpy impact strength (+23°) | DIN 53453                                    | kJ/m <sup>2</sup> | 30    |
| Charpy impact strength (-20°) | DIN 53454                                    | kJ/m <sup>2</sup> | 19    |
| Charpy impact strength (-40°) | DIN 53455                                    | kJ/m <sup>2</sup> | 16    |
| Electrically resistivity      | DIN IEC 167<br>+LUV-Methode<br>Sipel's tools | ohm/sq            | 10.2  |