



# Telcar® TL-2503S

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### General

|                   |                                             |                                |                           |
|-------------------|---------------------------------------------|--------------------------------|---------------------------|
| Material Status   | • Commercial: Active                        |                                |                           |
| Availability      | • Africa & Middle East<br>• Asia Pacific    | • Europe<br>• Latin America    | • North America           |
| Uses              | • Consumer Applications<br>• Flexible Grips | • General Purpose<br>• Handles | • Personal Care<br>• Toys |
| RoHS Compliance   | • RoHS Compliant                            |                                |                           |
| Appearance        | • Opaque                                    |                                |                           |
| Forms             | • Pellets                                   |                                |                           |
| Processing Method | • Extrusion                                 | • Injection Molding            |                           |

## ASTM & ISO Properties <sup>1</sup>

| Physical                                  | Nominal Value | Unit     | Test Method |
|-------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                | 1.02          |          | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) | 10            | g/10 min | ASTM D1238  |
| Elastomers                                | Nominal Value | Unit     | Test Method |
| Tensile Strength (Break)                  | 850           | psi      | ASTM D412   |
| Tensile Elongation (Break)                | 700           | %        | ASTM D412   |
| Hardness                                  | Nominal Value | Unit     | Test Method |
| Durometer Hardness (Shore A, 1 sec)       | 45            |          | ASTM D2240  |

## Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Rear Temperature       | 340 to 380    | °F   |
| Middle Temperature     | 350 to 390    | °F   |
| Front Temperature      | 360 to 400    | °F   |
| Nozzle Temperature     | 370 to 410    | °F   |
| Processing (Melt) Temp | 370 to 410    | °F   |
| Mold Temperature       | 77 to 150     | °F   |
| Injection Pressure     | 200 to 1000   | psi  |
| Injection Rate         | Moderate-Fast |      |
| Back Pressure          | 25.0 to 50.0  | psi  |
| Screw Speed            | 50 to 100     | rpm  |
| Cushion                | 0.150 to 1.00 | in   |
| Extrusion              | Nominal Value | Unit |
| Cylinder Zone 1 Temp.  | 330 to 370    | °F   |
| Cylinder Zone 2 Temp.  | 340 to 380    | °F   |
| Cylinder Zone 3 Temp.  | 350 to 390    | °F   |
| Cylinder Zone 5 Temp.  | 360 to 400    | °F   |
| Die Temperature        | 374 to 410    | °F   |

### Extrusion Notes

Screw Speed: 30 to 100 rpm

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.