



# Monprene® CP-28136 (PRELIMINARY DATA)

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

Monprene CP-28136, available colors, is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-28136 is a low density, low hardness grade that is suitable for injection molding and extrusion.

### General

|                   |                                                                                                       |                                                                                                          |                                                               |
|-------------------|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| Material Status   | • Commercial: Active                                                                                  |                                                                                                          |                                                               |
| Availability      | • Africa & Middle East<br>• Asia Pacific                                                              | • Europe<br>• Latin America                                                                              | • North America                                               |
| Features          | • Contact Clarity<br>• Good Flow<br>• Good Melt Strength<br>• Good Mold Release<br>• Good Moldability | • Good Processability<br>• Good Processing Stability<br>• High Elongation<br>• Low Density<br>• Low Flow | • Low Hardness<br>• Low Specific Gravity<br>• Without Fillers |
| Uses              | • Consumer Applications<br>• Gaskets<br>• Handles                                                     | • Safety Equipment<br>• Sporting Goods<br>• Tubing                                                       | • Writing Instruments                                         |
| RoHS Compliance   | • RoHS Compliant                                                                                      |                                                                                                          |                                                               |
| Appearance        | • Colors Available                                                                                    | • Translucent                                                                                            |                                                               |
| Forms             | • Pellets                                                                                             |                                                                                                          |                                                               |
| Processing Method | • Extrusion                                                                                           | • Injection Molding                                                                                      |                                                               |

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

| Physical                                 | Nominal Value | Unit     | Test Method |
|------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity               | 0.890         |          | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (200°C/5.0 kg) | 0.50          | g/10 min | ASTM D1238  |
| Elastomers                               | Nominal Value | Unit     | Test Method |
| Tensile Stress (300% Strain)             | 200           | psi      | ASTM D412   |
| Tensile Strength (Yield)                 | 900           | psi      | ASTM D412   |
| Tensile Elongation (Break)               | 700           | %        | ASTM D412   |
| Compression Set                          |               |          | ASTM D395B  |
| 73°F, 22 hr                              | 20            | %        |             |
| 158°F, 22 hr                             | 60            | %        |             |
| Hardness                                 | Nominal Value | Unit     | Test Method |
| Durometer Hardness                       |               |          | ASTM D2240  |
| Shore A, 1 sec, Injection Molded         | 38            |          |             |
| Shore A, 5 sec, Injection Molded         | 36            |          |             |

## Processing Information

| Injection        | Nominal Value | Unit |
|------------------|---------------|------|
| Rear Temperature | 360 to 450    | °F   |

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| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Middle Temperature     | 370 to 460    | °F   |
| Front Temperature      | 380 to 470    | °F   |
| Nozzle Temperature     | 390 to 480    | °F   |
| Processing (Melt) Temp | 390 to 480    | °F   |
| Mold Temperature       | 60 to 90      | °F   |
| Injection Pressure     | 200 to 800    | psi  |
| Injection Rate         | Fast          |      |
| Back Pressure          | 25.0 to 100   | psi  |
| Screw Speed            | 50 to 100     | rpm  |
| Cushion                | 0.150 to 1.00 | in   |

### Injection Notes

Drying is not necessary. However, if moisture is a problem, dry the pellets for 2 to 4 hours at 150°F (65°C).

| Extrusion             | Nominal Value | Unit |
|-----------------------|---------------|------|
| Cylinder Zone 1 Temp. | 360 to 450    | °F   |
| Cylinder Zone 2 Temp. | 370 to 460    | °F   |
| Cylinder Zone 3 Temp. | 380 to 470    | °F   |
| Cylinder Zone 4 Temp. | 380 to 470    | °F   |
| Cylinder Zone 5 Temp. | 390 to 480    | °F   |
| Die Temperature       | 390 to 480    | °F   |

### Extrusion Notes

Screw Speed: 30 to 100 rpm

### Notes

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