



# Monprene® CP-22332-20

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

Monprene CP-22332-20, available in NAT and colors, is a high performance thermoplastic elastomer designed for a variety of consumer product applications requiring a soft, rubber-like feel. Monprene CP-22332-20 is a low density, low hardness, RoHS compliant grade that is suitable for extrusion, injection molding and cast film.

### General

|                   |                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                          |                                                                                                                                                                                |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material Status   | • Commercial: Active                                                                                                                                                                                                                                     |                                                                                                                                                                                                                          |                                                                                                                                                                                |
| Availability      | • North America                                                                                                                                                                                                                                          |                                                                                                                                                                                                                          |                                                                                                                                                                                |
| Features          | <ul style="list-style-type: none"> <li>• Chemical Resistant</li> <li>• Excellent Printability</li> <li>• Good Adhesion</li> <li>• Good Colorability</li> <li>• Good Flexibility</li> <li>• Good Processability</li> <li>• Good Stretchability</li> </ul> | <ul style="list-style-type: none"> <li>• Good Toughness</li> <li>• Halogen Free</li> <li>• High Elasticity</li> <li>• Low Density</li> <li>• Low Flow</li> <li>• Low Hardness</li> <li>• Low Specific Gravity</li> </ul> | <ul style="list-style-type: none"> <li>• Lubricated</li> <li>• Outstanding Surface Finish</li> <li>• Resilient</li> <li>• Wear Resistant</li> <li>• Without Fillers</li> </ul> |
| Uses              | <ul style="list-style-type: none"> <li>• Cast Film</li> <li>• Consumer Applications</li> <li>• Film</li> </ul>                                                                                                                                           | <ul style="list-style-type: none"> <li>• Hygiene</li> <li>• Rubber Replacement</li> <li>• Sheet</li> </ul>                                                                                                               | <ul style="list-style-type: none"> <li>• Sporting Goods</li> <li>• Tubing</li> </ul>                                                                                           |
| RoHS Compliance   | • RoHS Compliant                                                                                                                                                                                                                                         |                                                                                                                                                                                                                          |                                                                                                                                                                                |
| Appearance        | • Colors Available                                                                                                                                                                                                                                       | • Natural Color                                                                                                                                                                                                          | • Translucent                                                                                                                                                                  |
| Forms             | • Pellets                                                                                                                                                                                                                                                |                                                                                                                                                                                                                          |                                                                                                                                                                                |
| Processing Method | • Cast Film                                                                                                                                                                                                                                              | • Extrusion                                                                                                                                                                                                              | • Injection Molding                                                                                                                                                            |

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

| Physical                                  | Nominal Value | Unit     | Test Method |
|-------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                | 0.892         |          | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)  | 4.5           | g/10 min | ASTM D1238  |
| Elastomers                                | Nominal Value | Unit     | Test Method |
| Tensile Stress <sup>2</sup> (100% Strain) | 98.0          | psi      | ASTM D412   |
| Tensile Stress <sup>2</sup> (300% Strain) | 208           | psi      | ASTM D412   |
| Tensile Strength <sup>2</sup> (Break)     | 1200          | psi      | ASTM D412   |
| Tensile Elongation <sup>2</sup> (Break)   | 800           | %        | ASTM D412   |
| Tear Strength <sup>2</sup>                | 204           | lbf/in   | ASTM D624   |
| Hardness                                  | Nominal Value | Unit     | Test Method |
| Durometer Hardness                        |               |          | ASTM D2240  |
| Shore A, 1 sec, Injection Molded          | 35            |          |             |
| Shore A, 5 sec, Injection Molded          | 34            |          |             |

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### Processing Information

| Injection              | Nominal Value  | Unit |
|------------------------|----------------|------|
| Rear Temperature       | 375 to 410     | °F   |
| Middle Temperature     | 400 to 420     | °F   |
| Front Temperature      | 400 to 440     | °F   |
| Nozzle Temperature     | 420 to 440     | °F   |
| Processing (Melt) Temp | 400 to 440     | °F   |
| Mold Temperature       | 80 to 120      | °F   |
| Injection Rate         | Moderate-Fast  |      |
| Screw Speed            | 50 to 100      | rpm  |
| Cushion                | 0.150 to 0.500 | 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. | 380 to 440    | °F   |
| Cylinder Zone 2 Temp. | 380 to 440    | °F   |
| Cylinder Zone 3 Temp. | 380 to 440    | °F   |
| Cylinder Zone 4 Temp. | 380 to 440    | °F   |
| Cylinder Zone 5 Temp. | 380 to 440    | °F   |
| Die Temperature       | 380 to 440    | °F   |

### Extrusion Notes

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

Screw Speed: 30 to 100 rpm

### Notes

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

<sup>2</sup> Die C, 20 in/min