



# Monprene® CP-13057G CLR

Teknor Apex Company - Thermoplastic Elastomer

## General Information

### Product Description

Monprene CP-13057G CLR is a very soft clear thermoplastic elastomer gel designed for a variety of consumer product applications. This grade exhibits high flow and is suitable for injection molding.

### General

|                   |                                               |                                           |                             |
|-------------------|-----------------------------------------------|-------------------------------------------|-----------------------------|
| Material Status   | • Commercial: Active                          |                                           |                             |
| Availability      | • Africa & Middle East<br>• Asia Pacific      | • Europe<br>• Latin America               | • North America             |
| Features          | • High Flow<br>• Low Density                  | • Low Hardness<br>• Low Specific Gravity  | • Soft<br>• Without Fillers |
| Uses              | • Consumer Applications<br>• Safety Equipment | • Sporting Goods<br>• Writing Instruments |                             |
| RoHS Compliance   | • RoHS Compliant                              |                                           |                             |
| Appearance        | • Clear/Transparent                           |                                           |                             |
| Forms             | • Pellets                                     |                                           |                             |
| Processing Method | • Injection Molding                           |                                           |                             |

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

| Physical                                   | Nominal Value | Unit     | Test Method |
|--------------------------------------------|---------------|----------|-------------|
| Density / Specific Gravity                 | 0.870         |          | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (125°C/2.16 kg)  | 4.0           | g/10 min | ASTM D1238  |
| Elastomers                                 | Nominal Value | Unit     | Test Method |
| Tensile Stress <sup>2</sup>                |               |          | ASTM D412   |
| Across Flow : 100% Strain                  | 14.0          | psi      |             |
| Flow : 100% Strain                         | 25.0          | psi      |             |
| Tensile Stress <sup>2</sup>                |               |          | ASTM D412   |
| Across Flow : 300% Strain                  | 23.0          | psi      |             |
| Flow : 300% Strain                         | 60.0          | psi      |             |
| Tensile Strength <sup>2</sup>              |               |          | ASTM D412   |
| Across Flow : Break                        | 323           | psi      |             |
| Flow : Break                               | 272           | psi      |             |
| Tensile Elongation <sup>2</sup>            |               |          | ASTM D412   |
| Across Flow : Break                        | 2100          | %        |             |
| Flow : Break                               | 790           | %        |             |
| Tear Strength <sup>2</sup>                 |               |          | ASTM D624   |
| Across Flow                                | 47.0          | lbf/in   |             |
| Flow                                       | 32.0          | lbf/in   |             |
| Compression Set <sup>3</sup> (73°F, 22 hr) | 39            | %        | ASTM D395B  |
| Hardness                                   | Nominal Value | Unit     | Test Method |
| Durometer Hardness                         |               |          | ASTM D2240  |
| Shore A, 1 sec, Injection Molded           | 8             |          |             |
| Shore OO, 5 sec, Injection Molded          | 57            |          |             |

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### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Rear Temperature       | 250 to 350    | °F   |
| Middle Temperature     | 260 to 360    | °F   |
| Front Temperature      | 270 to 370    | °F   |
| Nozzle Temperature     | 280 to 380    | °F   |
| Processing (Melt) Temp | 280 to 380    | °F   |
| Mold Temperature       | 50 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).

### Notes

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

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

<sup>3</sup> Type 1