



# FLEXALLOY® 9100-35

Teknor Apex Company - Polyvinyl Chloride Elastomer

## General Information

### General

|                   |                                               |                                                        |                                            |
|-------------------|-----------------------------------------------|--------------------------------------------------------|--------------------------------------------|
| Material Status   | • Commercial: Active                          |                                                        |                                            |
| Availability      | • Africa & Middle East<br>• Asia Pacific      | • Europe<br>• Latin America                            | • North America                            |
| Features          | • General Purpose<br>• Good Thermal Stability | • Recyclable Material<br>• Ultra High Molecular Weight | • Weather Resistant                        |
| Uses              | • Film<br>• Footwear<br>• Gaskets<br>• Hose   | • Rope<br>• Seals<br>• Sheet<br>• Tool/Tote Box        | • Tubing<br>• Weatherstripping<br>• Wheels |
| Forms             | • Pellets                                     |                                                        |                                            |
| Processing Method | • Extrusion                                   | • Injection Molding                                    |                                            |

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

| Physical                             | Nominal Value  | Unit   | Test Method |
|--------------------------------------|----------------|--------|-------------|
| Density / Specific Gravity           | 1.07           |        | ASTM D792   |
| Molding Shrinkage - Flow             | 0.010 to 0.025 | in/in  | ASTM D955   |
| Mechanical                           | Nominal Value  | Unit   | Test Method |
| Tensile Strength (100% Strain)       | 300            | psi    | ASTM D638   |
| Tensile Strength (Break)             | 900            | psi    | ASTM D638   |
| Tensile Elongation (Break)           | 380            | %      | ASTM D638   |
| Elastomers                           | Nominal Value  | Unit   | Test Method |
| Tear Strength <sup>2</sup>           | 105            | lbf/in | ASTM D624   |
| Compression Set                      |                |        | ASTM D395   |
| 73°F, 22 hr                          | 23             | %      |             |
| 158°F, 22 hr                         | 61             | %      |             |
| Hardness                             | Nominal Value  | Unit   | Test Method |
| Durometer Hardness (Shore A, 15 sec) | 35             |        | ASTM D2240  |
| Thermal                              | Nominal Value  | Unit   | Test Method |
| Continuous Use Temperature           | 140            | °F     | ASTM D794   |
| Brittleness Temperature              | -71.0          | °F     | ASTM D746   |

### Additional Information

Brittle Temperature, ASTM D746: <-57°C

## Processing Information

| Injection               | Nominal Value        | Unit |
|-------------------------|----------------------|------|
| Suggested Max Regrind   | 20                   | %    |
| Rear Temperature        | 320 to 350           | °F   |
| Middle Temperature      | 320 to 350           | °F   |
| Front Temperature       | 320 to 350           | °F   |
| Mold Temperature        | 75 to 125            | °F   |
| Back Pressure           | 50.0 to 150          | psi  |
| Screw L/D Ratio         | 20.0:1.0 to 24.0:1.0 |      |
| Screw Compression Ratio | 2.0:1.0 to 3.0:1.0   |      |