**Technical Data Sheet**

# POLYTROPE® STR 3570EU-01 CLEAR

Enhanced Polyolefin (Capstock Resin)
Engineering Plastics

## Product Description

POLYTROPE STR 3570EU resin is a high gloss, non-stress whitening, weatherable, olefin cap resin providing exceptional durability. It is specifically designed for the co-extrusion process as a cap resin over ethylene base resins such as HMWPE. It is especially suited for thermoformed applications, as it maintains its' clarity, DOI, and high gloss through the thermoforming process. POLYTROPE STR 3570EU-01 CLEAR can be used as a clear cap or it can be easily colored. The high clarity, gloss and durability of the cap resin enables it to provide an economical solution to produce high gloss appearance parts in HMWPE.

## General

| | | | |
|---|---|---|---|
| Features | • Chemical Resistant<br>• Durable<br>• Good Scratch Resistance | • High Clarity<br>• Low Temperature Impact Resistance<br>• Recyclable Material | • Stain Resistant<br>• Stress Whitening Resistant<br>• Weather Resistant |
| Forms | • Pellets | | |
| Processing Method | • Coextrusion<br>• Extrusion | • Profile Extrusion<br>• Sheet Extrusion | • Thermoforming |

| Physical | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---|---|---|---|
| Density / Specific Gravity [1] | 0.930 | 0.928 g/cm³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 0.79 g/10 min | 0.79 g/10 min | ISO 1133 |
| **Mechanical** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Tensile Stress [2] (Yield, 73°F (23°C)) | 2400 psi | 16.5 MPa | ISO 527-2 |
| Tensile Strain [2] (Break, 451°F (233°C)) | 250 % | 250 % | ISO 527-2 |
| Flexural Modulus - Chord [3] (73°F (23°C)) | 55000 psi | 379 MPa | ISO 178 |
| **Impact** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Instrumented Dart Impact | | | ASTM D3763 |
| -22°F (-30°C), Total Energy, Ductile Failure | 340 in·lb | 38.4 J | |
| **Thermal** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Heat Deflection Temperature | | | ISO 75-2/Bf |
| 66 psi (0.45 MPa), Unannealed | 130 °F | 54.4 °C | |
| **Flammability** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Flame Rating (0.13 in (3.2 mm), All Colors) | HB | HB | UL 94 |
| **Optical** | **Nominal Value (English)** | **Nominal Value (SI)** | **Test Method** |
| Gardner Gloss | | | ISO 2813 |
| 60°, 125 mil (3180 µm), Thermoformed, Smooth | 50 to 70 | 50 to 70 | |

### Notes

[1] Method A

[2] Type 1, 2.0 in/min (50 mm/min)

[3] Type 1A, 0.079 in/min (2.0 mm/min)

### Notes

These are typical property values not to be construed as specification limits.