

AuroraFlex™ 2850STE

Aurora Material Solutions, LLC - *Thermoplastic Elastomer*

General Information

Product Description

A highly resilient Thermoplastic Elastomer designed for applications that require excellent tensile strength and recovery. This material possesses excellent processability and can be both molded and extruded.

General

| | | | |
|-------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • Good Processability | • High Tensile Strength | • Resilient |
| Uses | • Aerospace Applications • Agricultural Applications • Appliances • Automotive Applications • Capstock | • Consumer Applications • Electrical/Electronic Applications • Energy Storage • Film • Footwear | • Furniture • Medical/Healthcare Applications • Personal Care • Sheet |
| Processing Method | • Extrusion | • Injection Molding | |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|------------------------------------------|----------------|----------|-------------|
| Density / Specific Gravity | 0.862 to 0.922 | | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (200°C/4.9 kg) | 17 | g/10 min | ASTM D1238 |
| Elastomers | Nominal Value | Unit | Test Method |
| Tensile Stress (100% Strain) | 189 | psi | ASTM D412 |
| Tensile Strength | 1640 | psi | ASTM D412 |
| Tensile Elongation (Break) | 700 | % | ASTM D412 |
| Hardness | Nominal Value | Unit | Test Method |
| Durometer Hardness (Shore A, 10 sec) | 47 to 53 | | ASTM D2240 |

Processing Information

| Injection | Nominal Value | Unit |
|-------------------------|--------------------|------|
| Rear Temperature | 331 to 351 | °F |
| Front Temperature | 360 to 370 | °F |
| Nozzle Temperature | 379 to 399 | °F |
| Mold Temperature | 70 to 100 | °F |
| Injection Rate | Fast | |
| Back Pressure | 99.9 to 200 | psi |
| Screw Compression Ratio | 2.5:1.0 to 3.0:1.0 | |

