

Vectra® S625

Celanese Corporation - Liquid Crystal Polymer

Sunday, November 3, 2019

| General Information | | | | | |
|----------------------------------|----------------------------------------------|-----------------------------------|-----------------|--|--|
| Product Description | | | | | |
| Low friction and wear resistance | e. Chemical abbreviation according to ISC | O 1043-1 : LCP Inherently flame | retardant. | | |
| General | | | | | |
| Material Status | Commercial: Active | | | | |
| Availability | Africa & Middle East | • Europe | North America | | |
| | Asia Pacific | Latin America | • North America | | |
| Features | Flame Retardant | Low Friction | Wear Resistant | | |
| RoHS Compliance | Contact Manufacturer | | | | |
| Resin ID (ISO 1043) | • LCP | | | | |

| ASTM & ISO Properties ¹ | | | | | |
|----------------------------------------------------|---------------|-----------|-----------------|--|--|
| Physical | Nominal Value | Unit | Test Method | | |
| Density | 1.53 | g/cm³ | ISO 1183 | | |
| Molding Shrinkage | | | ISO 294-4 | | |
| Across Flow | 0.80 | % | | | |
| Flow | 0.0 | % | | | |
| Mechanical | Nominal Value | Unit | Test Method | | |
| Tensile Modulus | 1.20E+6 | psi | ISO 527-2/1A | | |
| Tensile Stress (Break) | 17500 | psi | ISO 527-2/1A/50 | | |
| Tensile Strain (Break) | 3.0 | % | ISO 527-2/1A/50 | | |
| Flexural Modulus (73°F) | 1.38E+6 | psi | ISO 178 | | |
| Flexural Stress (73°F) | 22000 | psi | ISO 178 | | |
| Impact | Nominal Value | Unit | Test Method | | |
| Notched Izod Impact Strength (73°F) | 1.9 | ft·lb/in² | ISO 180/1A | | |
| Unnotched Izod Impact Strength (73°F) | 12 | ft·lb/in² | ISO 180/1U | | |
| Thermal | Nominal Value | Unit | Test Method | | |
| Heat Deflection Temperature (264 psi, Unannealed) | 520 | °F | ISO 75-2/A | | |
| Heat Deflection Temperature (1160 psi, Unannealed) | 264 | °F | ISO 75-2/C | | |
| Vicat Softening Temperature | 441 | °F | ISO 306/B50 | | |
| Melting Temperature ² | 662 | °F | ISO 11357-3 | | |

| Processing Information | | | |
|------------------------|--------------------|--|--|
| njection | Nominal Value Unit | | |
| Drying Temperature | 302 °F | | |
| Drying Time | 6.0 hr | | |
| Suggested Max Moisture | 0.010 % | | |
| Hopper Temperature | 68 to 104 °F | | |
| Rear Temperature | 653 to 671 °F | | |
| Middle Temperature | 671 to 689 °F | | |
| Front Temperature | 689 to 707 °F | | |
| Nozzle Temperature | 689 to 707 °F | | |
| Processing (Melt) Temp | 689 to 707 °F | | |
| Mold Temperature | 176 to 284 °F | | |



Vectra® S625

Celanese Corporation - Liquid Crystal Polymer

| Injection | Nominal Value Unit |
|-----------------|--------------------|
| Injection Rate | Fast |
| Back Pressure | < 435 psi |
| Injection Notes | |

Feeding zone temperature: 60 to 80°C Zone4 temperature: 365 to 375°C Hot runner temperature: 365 to 375°C

Notes

¹ Typical properties: these are not to be construed as specifications.

² 10°C/min

