



## Zenite® 16301

Celanese Corporation - Liquid Crystal Polymer

Sunday, November 3, 2019

### General Information

#### Product Description

Zenite® 16301 is a 30% mineral reinforced liquid crystal polymer for injection molding. It has excellent impact resistance, excellent heat deflection temperature and is well suited for all kinds of demanding applications.

#### General

|                        |                                                                                   |
|------------------------|-----------------------------------------------------------------------------------|
| Material Status        | • Commercial: Active                                                              |
| Availability           | • Africa & Middle East • Europe<br>• Asia Pacific • Latin America • North America |
| Filler / Reinforcement | • Mineral, 30% Filler by Weight                                                   |
| Features               | • Good Impact Resistance                                                          |

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

| Physical                                          | Nominal Value | Unit                  | Test Method     |
|---------------------------------------------------|---------------|-----------------------|-----------------|
| Density                                           | 1.62          | g/cm <sup>3</sup>     | ISO 1183        |
| Mechanical                                        | Nominal Value | Unit                  | Test Method     |
| Tensile Modulus                                   | 1.72E+6       | psi                   | ISO 527-2/1A    |
| Tensile Stress (Break)                            | 18900         | psi                   | ISO 527-2/1A/50 |
| Tensile Strain (Break)                            | 3.0           | %                     | ISO 527-2/1A/50 |
| Flexural Modulus (73°F)                           | 1.52E+6       | psi                   | ISO 178         |
| Flexural Stress (73°F)                            | 19700         | psi                   | ISO 178         |
| Impact                                            | Nominal Value | Unit                  | Test Method     |
| Charpy Notched Impact Strength (73°F)             | 8.9           | ft-lb/in <sup>2</sup> | ISO 179/1eA     |
| Thermal                                           | Nominal Value | Unit                  | Test Method     |
| Heat Deflection Temperature (264 psi, Unannealed) | 457           | °F                    | ISO 75-2/A      |
| Melting Temperature <sup>2</sup>                  | 626           | °F                    | ISO 11357-3     |

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 284 to 338    | °F   |
| Drying Time            | 4.0 to 6.0    | hr   |
| Suggested Max Moisture | 0.010         | %    |
| Hopper Temperature     | 68 to 86      | °F   |
| Rear Temperature       | 599 to 617    | °F   |
| Middle Temperature     | 608 to 626    | °F   |
| Front Temperature      | 617 to 635    | °F   |
| Processing (Melt) Temp | 563 to 590    | °F   |
| Mold Temperature       | 176 to 248    | °F   |
| Back Pressure          | < 435         | psi  |

#### Injection Notes

Feeding Zone Temperature: 60 to 80°C  
Zone 4 Temperature: 330 to 340°C

#### Notes

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

<sup>2</sup> 10°C/min