



## Celanex® 2000-3

Celanese Corporation - Polybutylene Terephthalate

Monday, November 4, 2019

### General Information

#### Product Description

Celanex 2000-3 is a general purpose, unreinforced PBT with a good balance of mechanical properties and processability. Celanex 2000-3 is a high flow material. Celanex 2000-3 contains an internal lubricant for improved mold release.

#### General

|                 |                                                                                         |
|-----------------|-----------------------------------------------------------------------------------------|
| Material Status | • Commercial: Active                                                                    |
| Availability    | • North America                                                                         |
| Additive        | • Lubricant                                                                             |
| Features        | • General Purpose • Good Processability • Lubricated<br>• Good Mold Release • High Flow |
| Uses            | • General Purpose                                                                       |
| RoHS Compliance | • Contact Manufacturer                                                                  |

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

| Physical                                          | Nominal Value | Unit                  | Test Method     |
|---------------------------------------------------|---------------|-----------------------|-----------------|
| Melt Mass-Flow Rate (MFR) (250°C/2.16 kg)         | 70            | g/10 min              | ISO 1133        |
| Mechanical                                        | Nominal Value | Unit                  | Test Method     |
| Tensile Modulus                                   | 392000        | psi                   | ISO 527-2/1A    |
| Tensile Stress (Yield)                            | 8700          | psi                   | ISO 527-2/1A/50 |
| Tensile Strain (Yield)                            | 4.0           | %                     | ISO 527-2/1A/50 |
| Tensile Strain (Break)                            | 30            | %                     | ISO 527-2/1A/50 |
| Flexural Modulus (73°F)                           | 377000        | psi                   | ISO 178         |
| Flexural Stress (73°F)                            | 12300         | psi                   | ISO 178         |
| Impact                                            | Nominal Value | Unit                  | Test Method     |
| Charpy Notched Impact Strength (73°F)             | 1.9           | ft-lb/in <sup>2</sup> | ISO 179/1eA     |
| Charpy Unnotched Impact Strength (73°F)           | 48            | ft-lb/in <sup>2</sup> | ISO 179/1eU     |
| Notched Izod Impact Strength (73°F)               | 1.5           | ft-lb/in <sup>2</sup> | ISO 180/1A      |
| Hardness                                          | Nominal Value | Unit                  | Test Method     |
| Rockwell Hardness (M-Scale)                       | 78            |                       | ISO 2039-2      |
| Thermal                                           | Nominal Value | Unit                  | Test Method     |
| Heat Deflection Temperature (66 psi, Unannealed)  | 311           | °F                    | ISO 75-2/B      |
| Heat Deflection Temperature (264 psi, Unannealed) | 131           | °F                    | ISO 75-2/A      |
| Electrical                                        | Nominal Value | Unit                  | Test Method     |
| Volume Resistivity                                | 1.0E+17       | ohms-cm               | IEC 60093       |
| Electric Strength                                 | 380           | V/mil                 | IEC 60243-1     |
| Relative Permittivity (1 MHz)                     | 3.20          |                       | IEC 60250       |
| Dissipation Factor (1 MHz)                        | 0.0           |                       | IEC 60250       |

### Processing Information

| Injection             | Nominal Value | Unit |
|-----------------------|---------------|------|
| Suggested Max Regrind | 25            | %    |
| Hopper Temperature    | 68 to 122     | °F   |
| Rear Temperature      | 446 to 464    | °F   |
| Middle Temperature    | 455 to 482    | °F   |

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| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Front Temperature      | 455 to 482    | °F   |
| Nozzle Temperature     | 482 to 500    | °F   |
| Processing (Melt) Temp | 455 to 500    | °F   |
| Mold Temperature       | 149 to 199    | °F   |
| Injection Rate         | Fast          |      |
| Back Pressure          | 0.00 to 50.0  | psi  |

### Injection Notes

Die Temperature: 250 to 260°C  
Feed Temperature: 230 to 240°C  
Zone 4 Temperature: 240 to 260°C

### Notes

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