

# Fortron® 0214

Polyphenylene Sulfide  
Celanese Corporation

# PROSPECTOR®

www.ulprospector.com

## Technical Data

### Product Description

0214 is an unfilled grade exhibiting good melt strength. This grade demonstrates excellent heat and chemical resistance. It can be extruded to produce multi-filaments. Due to the excellent balance of flow and melt strength, this product is occasionally used for injection molding parts. Available standard in powder (0214B1), pellet (0214P1) and crystallized pellet (0214C1) form.

### General

Material Status	• Commercial: Active		
Literature <sup>1</sup>	• <a href="#">Technical Datasheet (English)</a>		
Search for UL Yellow Card	• <a href="#">Celanese Corporation</a> • <a href="#">Fortron®</a>		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant • Good Flow	• Good Heat Resistance • Good Melt Strength	
Uses	• Filaments		
RoHS Compliance	• Contact Manufacturer		
Forms	• Pellets	• Powder	
Processing Method	• Filament Extrusion	• Injection Molding	
Multi-Point Data	• Isochronous Stress vs. Strain (ISO 11403-1)		

Physical	Nominal Value Unit	Test Method
Density	1.35 g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage		ISO 294-4
Across Flow	1.5 %	
Flow	1.2 %	
Water Absorption (Saturation, 23°C)	0.020 %	ISO 62

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	3800 MPa	ISO 527-2/1A
Tensile Stress (Break)	90.0 MPa	ISO 527-2/1A/5
Tensile Strain (Break)	3.0 %	ISO 527-2/1A/5
Flexural Modulus (23°C)	3750 MPa	ISO 178
Flexural Stress	125 MPa	ISO 178
Compressive Stress (6% Strain)	120 MPa	ISO 604

Impact	Nominal Value Unit	Test Method
Notched Izod Impact Strength (23°C)	3.5 kJ/m <sup>2</sup>	ISO 180/1A
Unnotched Izod Impact Strength (23°C)	45 kJ/m <sup>2</sup>	ISO 180/1U

Hardness	Nominal Value Unit	Test Method
Rockwell Hardness (M-Scale)	95	ISO 2039-2

Thermal	Nominal Value Unit	Test Method
Heat Deflection Temperature		
1.8 MPa, Unannealed	110 °C	ISO 75-2/A
8.0 MPa, Unannealed	95.0 °C	ISO 75-2/C
Glass Transition Temperature <sup>3</sup>	90.0 °C	ISO 11357-2
Melting Temperature <sup>3</sup>	280 °C	ISO 11357-3
CLTE		ISO 11359-2
Flow	5.2E-5 cm/cm/°C	
Transverse	5.3E-5 cm/cm/°C	

Electrical	Nominal Value Unit	Test Method
Volume Resistivity	1.0E+11 ohms·cm	IEC 60093
Electric Strength	18 kV/mm	IEC 60243-1
Relative Permittivity (1 kHz)	3.20	IEC 60250
Comparative Tracking Index	125 V	IEC 60112



Fill Analysis	Nominal Value Unit	Test Method
Melt Density	1.15 g/cm <sup>3</sup>	Internal Method
Specific Heat Capacity of Melt	1830 J/kg/°C	

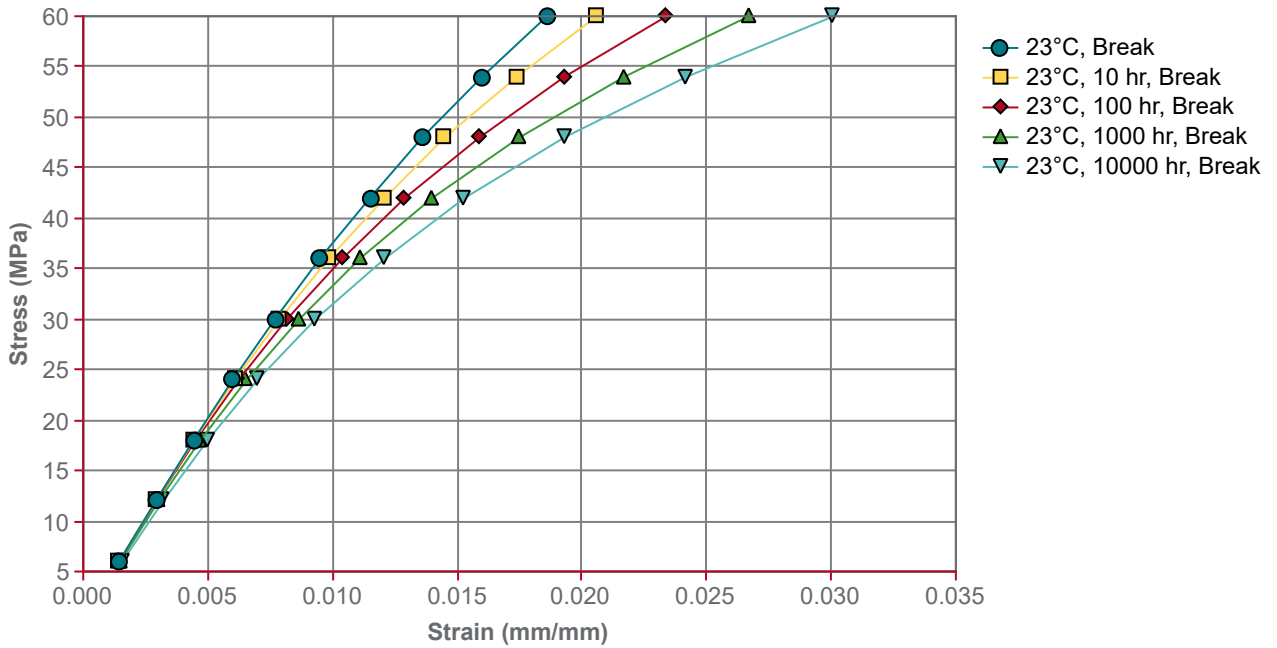
Injection	Nominal Value Unit
Drying Temperature	110 to 120 °C
Drying Time	3.0 to 4.0 hr
Suggested Max Moisture	0.020 %
Hopper Temperature	20 to 30 °C
Rear Temperature	290 to 300 °C
Middle Temperature	300 to 310 °C
Front Temperature	310 to 320 °C
Nozzle Temperature	300 to 310 °C
Processing (Melt) Temp	310 to 320 °C
Mold Temperature	140 to 160 °C
Injection Rate	Fast
Back Pressure	< 3.00 MPa

**Injection Notes**

Feeding zone temperature: 60 to 80°C  
 Zone4 temperature: 310 to 320°C  
 Hot runner temperature: 310 to 320°C



Isochronous Stress vs. Strain (ISO 11403-1)



#### Notes

<sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.

<sup>2</sup> Typical properties: these are not to be construed as specifications.

<sup>3</sup> 10°C/min



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## Where to Buy

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### Supplier

**Celanese Corporation**  
Florence, KY USA  
**Telephone:** 800-833-4882  
**Web:** <http://www.celanese.com/engineered-materials>

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### Distributor

**Amco Polymers**  
**Telephone:** 800-262-6685  
**Web:** <http://www.amcopolymers.com/>  
**Availability:** North America

**Channel Prime Alliance**  
**Telephone:** 800-247-8038  
**Web:** <http://www.channelpa.com/>  
**Availability:** North America

**Entec Polymers**  
**Telephone:** 800-375-5440  
**Web:** <http://www.entecpolymers.com/>  
**Availability:** North America

**RESINEX Group**  
*RESINEX is a Pan European distribution company. Contact RESINEX for availability of individual products by country.*  
**Telephone:** +32-14-672511  
**Web:** <http://www.resinex.com/>  
**Availability:** Europe

