



Fortron® 0205

Celanese Corporation - Polyphenylene Sulfide

Tuesday, November 5, 2019

General Information

Product Description

0205 is an easy flowing unfilled grade. It demonstrates excellent chemical resistance and thermal stability. Intended for compounding with various fillers. Available standard in pellet (0205P4) and powder (0205B4) form.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• Chemical Resistant	• Good Flow	• Good Thermal Stability
Uses	• Compounding		
RoHS Compliance	• Contact Manufacturer		
Forms	• Pellets	• Powder	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.35	g/cm ³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow	1.5	%	
Flow	1.2	%	
Water Absorption (Saturation, 73°F)	0.020	%	ISO 62
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	580000	psi	ISO 527-2/1A
Tensile Stress (Break)	9570	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.0	%	ISO 527-2/1A/5
Flexural Modulus (73°F)	566000	psi	ISO 178
Flexural Stress	18900	psi	ISO 178
Compressive Stress (6% Strain)	18900	psi	ISO 604
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact Strength (73°F)	0.95	ft-lb/in ²	ISO 180/1A
Unnotched Izod Impact Strength (73°F)	14	ft-lb/in ²	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 (264 psi, Unannealed)	239	°F	ISO 75-2/A
Heat Deflection Temperature (1160 psi, Unannealed)	203	°F	ISO 75-2/C
Glass Transition Temperature ²	194	°F	ISO 11357-2
Melting Temperature ²	536	°F	ISO 11357-3
CLTE - Flow	2.9E-5	in/in/°F	ISO 11359-2
CLTE - Transverse	2.9E-5	in/in/°F	ISO 11359-2
Electrical	Nominal Value	Unit	Test Method
Volume Resistivity	1.0E+11	ohms·cm	IEC 60093
Electric Strength	430	V/mil	IEC 60243-1
Comparative Tracking Index	100	V	IEC 60112

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Fill Analysis	Nominal Value	Unit
Specific Heat Capacity of Melt	0.437	Btu/lb/°F

Processing Information		
Injection	Nominal Value	Unit
Drying Temperature	230 to 248	°F
Drying Time	3.0 to 4.0	hr
Suggested Max Moisture	0.020	%
Hopper Temperature	68 to 86	°F
Rear Temperature	554 to 572	°F
Middle Temperature	572 to 590	°F
Front Temperature	590 to 608	°F
Nozzle Temperature	572 to 590	°F
Processing (Melt) Temp	590 to 608	°F
Mold Temperature	284 to 320	°F
Injection Rate	Fast	
Back Pressure	< 435	psi

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

Notes

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

² 10°C/min