

Technical Data Sheet

GEHR CPVC®



Physical Properties

General	Test Method	Unit	Value
Cell Classification	ASTM D1784	-	23447
Material Call-Out Designation	ASTM D6263	-	S-CPVC0211
Specific gravity	ASTM D792	g/cm ³	1.53
Water Absorption (saturation)	ASTM D570	%	0.5
Humidity Absorption (saturation)	ASTM D570	%	0.2
Mechanical			
Tensile strength	ASTM D638	psi	7,080
Tensile Modulus	ASTM D638	psi	387,000
Izod Impact, Notched @73°F	ASTM D256	ft-lb/in	2.3
Hardness, Shore-D	ASTM D2240	-	85
Flexural strength	ASTM D790	psi	10,600
Flexural Modulus	ASTM D790	psi	-
Thermal Properties			
Heat Deflection Temperature; HDT/A @264 psi	ASTM D648	°F	224
Coefficient of linear thermal expansion	ASTM D696	in/in/°F x 10 ⁻⁵	5.7
Melting Temperature	ASTM D3418	°F	360-385
Maximum permissible service temp.	UL 746B	°F	200
Lower permissible service temp.	UL 746B	°F	5
Electrical			
Dielectric Strength	ASTM D149	Volts/mil	-
Dielectric Constant	ASTM D150	60Hz @30°F	-
Volume Resistivity	ASTM D257	Ohm/cm @73°F	-
Fire Performance			
Flammability	UL 94	-	V-0*
Average Time of Burning	ASTM D635	seconds	<10
Average Extent of Burning	ASTM D635	mm	<25
Burning Rate	-	In/min	Self-Extinguishing
Limiting Oxygen Index (LOI)	ASTM D2863	%	60
Regulatory Compliance			
Drinking Water System components – Health Effects	NSF		Std 61
Physical Properties	NSF		Std 14
Other			
CPVC Cell Classification 23447 = S-CPVC0211 = Type IV, Grade 1 CPVC = CPVC 4120 = Rigid (unplasticized) CPVC			

* = tested but not listed

The physical properties data contained herein are typical values and reflect the current state of our knowledge. The values are obtained on test specimens of the material under specific test conditions and represent average values of a large number of tests. This data is to be used as a guideline only and should not be used for specification purposes for finished parts machined from GEHR stock shapes. Physical properties of finished parts can be influenced by material, processing, machining techniques, environmental factors, and part geometry. It is the end user's responsibility to determine the suitability for the intended application prior to use. GEHR plastics, Inc. (including its affiliates) does not warrant, promise, or guarantee the suitability of this product for use in specific applications and disclaims any implied warranties, including but not limited to any warranties of merchantability or fitness for a particular purpose.