

**CPVC physical properties and ASTM standards for fittings.**

## CPVC Schedule 80 fittings

### PHYSICAL PROPERTIES

PHYSICAL PROPERTY	TEST CONDITION	VALUE	REFERENCE
Specific Gravity	73°F	1.52	ASTM D-792
Rockwell Hardness(R)	73°F	121	ASTM D-785
Heat Deflection @ 264 psi	°F	212	ASTM D-645
Tensile Strength	73°F	8200	ASTM D-638
Tensile Modulus (psi)	73°F	430,000	ASTM D-638
Flexural Strength (psi)	73°F	15,000	ASTM D-790
Flexural Modulus (psi)	73°F	410,000	ASTM D-790
Izod Impact Ft. Lbs./In. Notch	73°F	1.6	ASTM D-256
Water Absorption (24 hrs.)	73°F	+0.04	ASTM D-570
Coefficient of Expansion (°F), in./in./x 10 <sup>6</sup>		3.7	ASTM D-696
Flammability	.062"	V-0	UL-94
Cell Designation		23557B	ASTM D-1784



**ASTM F437**  
CPVC Schedule 80 threaded fitting specifications

**ASTM F439**  
CPVC Schedule 80 socket fitting specifications

**ASTM F441**  
CPVC Schedule 80 pipe specifications

**ASTM F493**  
CPVC Solvent Cements

**ASTM D1784**  
Rigid CPVC Compounds

**ANSI B2.1**  
Specifications for threaded fittings and pipe

**ANSI B16.1**  
Specifications for flange type fittings

**NSF14**  
Specifications for potable water and quality control standards

## PVC physical properties and ASTM standards for fittings.

### PHYSICAL PROPERTIES PVC SCHEDULE 80 TYPE I, GRADE I

PHYSICAL PROPERTY	VALUE	REFERENCE
Specific Gravity +/- 0.02	1.40	ASTM D792
Tensile Strength, psi @ 73°F	7100	ASTM D638
Modulus of Elasticity in Tension, psi @ 73°F	400,000	ASTM D638
Flexural Strength, psi	12,000 – 14,000	ASTM D790
Izod Impact, Ft. Lbs./in., Notch at 73°F	.65	ASTM D256
Heat Deflection °F @ 264 psi	160	ASTM D648
Heat Resistance °F	140	
Thermal Conductivity, BTU/hr./sq. Ft./ °F/in.	1.2	ASTM C177
Coefficient of Expansion, in./in./ °F x 10 <sup>-5</sup>	3.0	ASTM D696
Water Absorption, % 24 hrs. @ 73°F	.05	ASTM D570
Cell Classification	12454B	ASTM D1784
Color Code	Dark Gray	



### STANDARDS

**ASTM D1784**

Rigid PVC Compounds

**ASTM D1785**

PVC Schedule 80 pipe specifications

**ASTM D2464**

PVC Schedule 80 threaded fitting specifications.

**ASTM D2467**

PVC Schedule 80 socket fitting Specifications

**ASTM D2564**

PVC Solvent Cements

**ASTM D2855**

Standard practice for solvent cemented Joints for PVC pipe and fittings.

**ANSI B2.1**

Specifications for flange type fittings

**ANSI B16.1**

Specifications for flange type fittings

**NSF 14**

Specifications for potable water and quality control standards

## PVC physical properties and ASTM standards for fittings.

### PHYSICAL PROPERTIES PVC SCHEDULE 40 TYPE I, GRADE I

PHYSICAL PROPERTY	VALUE	REFERENCE
Specific Gravity +/- 0.02	1.40	ASTM D792
Tensile Strength, psi @ 73°F	7100	ASTM D638
Modulus of Elasticity in Tension, psi @ 73°F	400,000	ASTM D638
Flexural Strength, psi	12,000 – 14,000	ASTM D790
Izod Impact, Ft. Lbs./in., Notch at 73°F	.65	ASTM D256
Heat Deflection °F @ 264 psi	160	ASTM D648
Heat Resistance °F	140	
Thermal Conductivity, BTU/hr./sq. Ft./ °F/in.	1.2	ASTM C177
Coefficient of Expansion, in./in./ °F x 10 <sup>-5</sup>	3.0	ASTM D696
Water Absorption, % 24 hrs. @ 73°F	.05	ASTM D570
Cell Classification	12454B	ASTM D1784
Color Code	White	

### STANDARDS

**ASTM D1784**

Standard specifications for PVC Compounds.

**ASTM D1785**

Standard specifications for PVC Schedule 40 pipe.

**ASTM D2466**

Standard specifications for socket type PVC Schedule 40 plastic fittings.

**ASTM D2564**

Standard specifications for PVC Solvent Cements.

**ASTM D2855**

Standard specifications for making solvent cemented joints with PVC pipe and fittings.

**NSF 14**

Standard specifications for potable water and quality control.