

ABS & PVC Pipe – Material Data Sheet

Physical Properties of ABS and PVC Materials*

PROPERTY	UNITS	ABS	ASTM NO.	PVC	ASTM NO.
Specific Gravity	g/cc	1.05	D 792	1.40	D 792
Tensile Strength (73°F) Minimum	Psi	4,500	D 638	7,000	D 638
Modulus of Elasticity in Tension (73°F) Minimum	Psi	240,000	D 638	400,000	D 638
Flexural Strength (73°F)	Psi	10,585	D 790	14,000	D 790
Izod Impact (notched at 73°F) Minimum	ft lb/ in. of notch	6.00	D 256	0.65	D 256
Hardness (Durometer D)		70	D 2240	80 ± 3	D 2240
Hardness (Rockwell R)		100	D 785	110 - 120	D 785
Compressive Strength (73°F)	Psi	7,000	D 695	9,600	D 695
Hydrostatic Design Stress	Psi	N/A		2,000	D 1598
Coefficient of Linear Expansion	in./ in./ °F	5.5 x 10 ⁻⁵	D 696	3.0 x 10 ⁻⁵	D 696
Heat Distortion Temperature at 264 psi Minimum	degree F	180	D 648	160	D 648
Coefficient of Thermal Conductivity	BTU/ hr/sqft/ °F/ in.	1.1	C 177	1.2	C 177
Specific Heat	BTU/ °F/lb	0.35	D 2766	0.25	D 2766
Water Absorption (24 hrs at 73°F)	% weight gain	0.40	D 570	.05	D 570
Cell Classification- Pipe		42222	D 3965	12454	D 1784
Cell Classification- Fittings		32222	D 3965	12454	D 1784
Burning Rate				Self Ext .	D 635
Burning Class				V-0	UL 94**

*Above data is based upon information provided by the raw material manufacturers. It should be used only as a recommendation and not as a guarantee of performance. **Underwriters Laboratories standard

Call Professional Plastics at (888) 995-7767 or
E-Mail sales@proplas.com
Order Online at www.professionalplastics.com