Applications

- Welded Tanks, liners
- Valves, fittings, and piping systems
- Ducts
- Pumps

Advantages

- High impact strength
- Dimensionally stabile
- Easily machined using standard metal working tools
- Corrosion resistant
- Easily cemented and welded
- Lightweight
- Excellent electrical properties
- Excellent fire rating
- Good chemical resistance

Grades

- CPVC
- Fire Retardant
- Pipe Grade

NOTE: Several grades of this material are available. For additional information regarding this plastic, contact your Emco Industrial Plastics representative or call (800) 292-9906.

CPVC
CPVC, Pipe Grade
[Chlorinated Polyvinyl Chloride, Pipe Grade]

CPVC pipe is produced from a specialty blend of chlorinated polyvinyl chloride material with unique physical properties desirable for piping applications (i.e., improved impact resistance and good fire resistance capabilities). Pipe grade CPVC product line includes schedules 40 and 80 piping from 1/4" through 24" diameters. CPVC piping systems can handle more than three-fourths of the temperature/pressure requirements of today's typical process plants. CPVC pressure pipe has an upper working temperature limit of 200° F (93° C), or approximately 60° F (15° C) above that of Type I Grade I PVC. As with all thermoplastic piping systems, CPVC's ability to withstand pressure varies with pipe diameter, wall thickness, and temperature. As the pipe diameter and temperature increases, the pressure rating of the product decreases. For example, 1/2" Schedule 80 CPVC pipe is engineered for continuous service of 850 psi @ 73°F (23°C). The same pipe in service @ 180°F (82°C) carries a maximum working pressure rating of 210 psi at this temperature. 6" Schedule 80 CPVC pipe is designed for 270 psi @ 73°F, and 54 psi @ 200°F.

Since the chemical properties of resins may vary according to the amount of chlorination and the types and quantity of additives, contact an Emco Industrial Plastics representative before designing material handling systems using CPVC.

Brand Names
Harvel®

Emco Industrial Plastics doesn't claim to represent all of the manufacturers or trade name products listed. This list is intended as a guide of typical materials available for purchase from Emco Industrial Plastics, Inc. For additional information, contact an Emco Industrial Plastics representative at (800) 292-9906.

Availability

TYPE	SIZE	LENGTH	COLOR
Sched 40	1/4" - 24" DIA	20' lengths, CTS	Natural, Black
Sched 80	1/4" - 24" DIA	20' lengths, CTS	
Other	Fittings: Tees, Elbows, Flanges, Couplers, Plugs, Caps, Bushings, Crosses, Unions		

Give us your cut-to-size dimensions. We will precision-cut these plastics to your exact size. Additional sizes and colors available upon request.

Properties

PHYSICAL PROPERTIES	UNITS	ASTM	RESULTS
Density	lb/in3	D792	1.55 g/cu.cm
Water Absorption, 24 hrs	%	D570	0.03
MECHANICAL PROPERTIES	**UNITS**	**ASTM**	**RESULTS**
Tensile Strength @yield	psi	D638	8000
Tensile Modulus	psi	D638	360000
Flexural Strength	psi	D790	15100
Flexural Modulus	psi	D790	415000
Compressive Strength	psi	D695	10000
Compressive Modulus	psi	D695	196000
Hardness, Rockwell R		D785	119
IZOD Impact Strength Notched	ft-lb/in	D256	1.5
THERMAL PROPERTIES	**UNITS**	**ASTM**	**RESULTS**
Coefficient of Linear Thermal Expansion	(x 10-5 in./in./°F)	D696	3.4 x105
Melting Temperature	°F	D3418	295
Flammability Rating		UL94	V - O
ELECTRICAL PROPERTIES	**UNITS**	**ASTM**	**RESULTS**
Dielectric Strength, 1/8" th.	V/mil	D149	1250
Dielectric Constant @60HZ		D150	3.7 @30° F
Volume Resistivity	ohm-cm	D257	3.4 x 1015

NOTE: The property values presented above are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Contact us for manufacturers' complete material property datasheets. All values at 73°F (23°C) unless otherwise noted.

