

Applications

- Welded Tanks, liners
- Valves, fittings, and piping systems
- Fume scrubbers
- Ducts
- Pumps
- Machine guards

Advantages

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

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, Fire Retardant [Chlorinated Polyvinyl Chloride, Fire Retardant]

CPVC shares most of the features and properties of its close relative, PVC. It is also readily workable, including machining, welding, and forming. Because of its excellent corrosion resistance at elevated temperatures, CPVC is ideally suited for self-supporting constructions where temperatures up to 200° F (93° C) are present. The ability to bend, shape, and weld CPVC enables its use in a wide variety of process applications including tanks, scrubbers, and ventilation systems. It exhibits excellent fire resistance, chemical resistance, and is readily available in sheets, rods, and tubing. CPVC is a popular engineering material due to its relatively low cost, high glass transition temperature, high heat distortion temperature, chemical inertness, and flame and smoke properties. CPVC is used in a variety of industrial applications where a high functional temperature and resistance to corrosive chemicals are desirable.

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

Flametec®, Simona® Brigade 7510

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
Sheet	1/8" - 2" TH	48" x 96"; CTS	White

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/in ³	D792	0.055
Water Absorption, 24 hrs	%	D570	0.04
MECHANICAL PROPERTIES	UNITS	ASTM	RESULTS
Tensile Strength @yield	psi	D638	8200
Tensile Modulus	psi	D638	460000
Tensile Elongation @Break	%	D638	27
Flexural Strength	psi	D790	15000
Flexural Modulus	psi	D790	430000
Hardness, Rockwell R		D785	121
IZOD Impact Strength Notched	ft-lb/in	D256	1.6
THERMAL PROPERTIES	UNITS	ASTM	RESULTS
Coefficient of Linear Thermal Expansion	(x 10 ⁻⁵ in./in./°F)	D696	3.7
Heat Deflection Temp at 264 psi	°F		217
Melting Temperature	°F	D3418	NA
Max Operating Temp	°F		200
Thermal Conductivity	BTU-in/ft ² -hr-°F	C177	0.95
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 10 ¹⁵

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.