FM4910 RATED PLASTICS

FLAMETEC® THERMAX

FM4910 Fire Retardant Plastic



**FLAMETEC® is the registered trademark of

The Flametec® family of Fire Retardant plastics have been specially formulated to provide protection against the spread of fire or flames. All of the materials shown below are listed with **FM Global** (formerly Factory Mutual Insurance Company) as compliant to **FM4910 requirements.** When **FM4910 listed materials** are used for construction in an area, fire suppression systems are not required.

The Cleanroom Materials Flammability Test Protocol (Class 4910) contains the method for conducting tests. Now, wet-bench manufacturers and users can apply the cleanroom protocol to develop plastic materials and equipment capable of resisting fire, emitting little, if any smoke, and producing little, if any, corrosive by-products. Materials passing the cleanroom protocol, subsequently, can be listed in the Approval Guide, a publication of FM Approvals.

VYCOM CPG

GENERAL PROPERTIES	ASTM / UL	THBRMAX™PVC	THBRMAX™PVC XL
PHYSICAL			
Specific Gravity (g/cm ³)	D792	1.42	1.53
Water Absorption, 24 hrs (%)	D570	0.15 - 0.30	0.10
Cell Class	D1784	13563	12354
MECHANICAL			
Tensile Strength at Yield (psi)	D638	8,525	6,600
Tensile Modulus (psi)	D638	473,000	436,800
Flexural Strength (psi)	D790	12,800	12,000
Flexural Modulus (psi)	D790	481,000	445,000
Compressive Strength (psi)	D695	-	-
Hardness, Shore D	D2240	89	85
IZOD Notched Impact (ft-lb/in)	D256	1.82	1.2
THERMAL			
Coeff. of Thermal Expansion(x 10 ⁻⁵ in./in./F°)	D696	3.2	3.4
Heat Deflection Temp (°F / °C) @ 66 psi	D648	160 / 71	166 / 74
Heat Deflection Temp (°F / °C) @ 264 psi	D648	144 / 62	159 / 71
Melting Temperature (°F / °C)	-	-	-
Max Use Temperature (°F / °C)	_	_	-
ELECTRICAL			
Dielectric Strength (@ 1/8" thick) (V/mil)	D149	-	_
Dielectric Constant at 1 kHz	D150	-	_
Dielectric Factor at 1 kHz	D150	-	_
Arc Resistance (sec)	D495	-	_
Volume Resistivity (ohm/cm) @ 50% RH	D257	-	_
FLAMMABILITY			
Factory Mutual	FM4910	Listed	Listed
Vertical Burn Test	UL-94	V-0	V-0; 5-VA
Flame Spread Index	E-84	20	10

NOTE: The information contained here in is typical values intended for reference only. They should NOT be used as a basis for design specifications or quality control.