



FPC 6805

TYPICAL POLYMER PROPERTIES*

FPC 6805 is a low molecular weight PVC, general purpose dispersion resin. It has found wide acceptance in such diverse applications as roll coating, spraying, strand coating, dip coating, slush molding, rotational casting (molding), cellular vinyls, sealants, and organosols.

The rheological properties of FPC 6805, at room temperature are similar to conventional low molecular weight dispersion resins when using low solvency type plasticizers. With high solvency type plasticizer systems, an increase in gelation can be achieved. Highly aromatic diluents will also accelerate the fusion rate of organosols prepared with FPC 6805. This resin is also characterized with exceptional air release.

FPC 6805 has found extensive use in cast cellular vinyls using Azo type chemical blowing agents. The speed at which FPC 6805 enters the fused state assures that gas evolution will occur in a satisfactory hot melt environment. This allows formulation latitude with respect to obtaining acceptable foam quality under varying processing conditions. Faster line speed, lower processing temperature, or use of less blowing agent are some of the advantages of using FPC 6805 instead of higher molecular weight resins. Higher surface gloss can also be achieved using FPC 6805 over conventional high molecular weight resins.

	FPC 6805
Relative Viscosity (1% in Cyclohexanone @ 25°C.)	2.10
Inherent Viscosity (ASTM D-1243-66)	0.84
Hot Melt Viscosity, M-Kg @10 Minutes (Firestone Control Test C-157a)	0.50 (174°C)
Specific Gravity	1.4
Brookfield Viscosity Range** 20 RPM, poises (Firestone Control Test C-170a)	50-80
Extrusion Rheometer Viscosity Range** 80 psig, poises (Firestone Control Test C-171a)	35-60
Ultimate Tensile Strength, psi (ASTM D-412) when fused at	
120°C. (248°F.)	500
150°C. (302°F.)	900
180°C. (356°F.)	1500
210°C. (410°F.)	1900
Volume Resistivity, ohm-cm x 10 ⁸ @ Room Temperature @ 60°C. (ASTM D-257-66)	66 3
ASTM Classification (ASTM D-1755-66)	D1-32

*These values are not to be considered specifications.

**Special Rheological properties are available for specific applications.

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