



FPC 605

TYPICAL POLYMER PROPERTIES* FPC 605

FPC 605 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 605, at room temperature are similar to conventional high molecular weight dispersion resins such as FPC 654 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 605. This resin is also characterized with exceptional air release.

FPC 605 has found extensive use in cast cellular vinyls using Azo type chemical blowing agents. The speed at which FPC 605 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 605 instead of higher molecular weight resins. Higher surface gloss can also be achieved using FPC 605 over conventional high molecular weight resins.

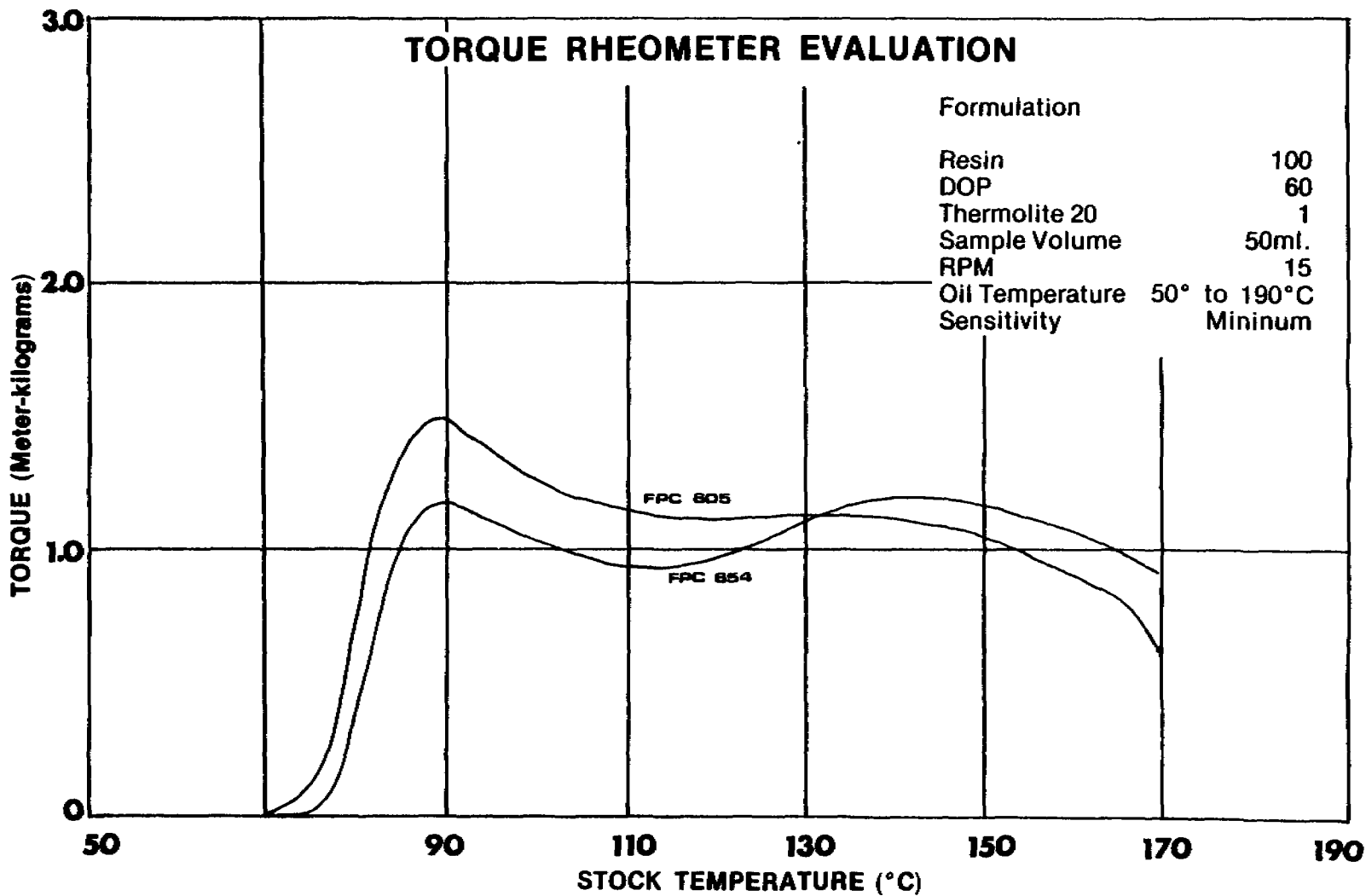
FPC 605 is well defined in FDA Regulations 121-2514, 121-2520, 121-2526, 121-2571, 121-2550. It is understood, however, that the formulator must satisfy himself that his final formulation meets the regulative requirements of the Food and Drug Administration.

Relative Viscosity (1% in Cyclohexanone @ 25°C.)	2.05
Inherent Viscosity (ASTM D-1243-66)	0.81
Hot Melt Viscosity, M-Kg @ 10 Minutes (Firestone Control Test C-157a)	0.46 (174°C)
Specific Gravity	1.4
Brookfield Viscosity Range** (Firestone Control Test C-15e)	30-60
Extrusion Rheometer Viscosity Range ** 10 to 80 psig, poises (Firestone Control Test C-66b)	60-120
Ultimate Tensile Strength, psi (ASTM D-412), when fused at	
120°C. (248°F.)	350
150°C. (302°F.)	850
180°C. (356°F.)	1900
210°C. (410°F.)	2200
Volume Resistivity, ohm-cm x 10 ⁸ @ Room Temperature	66
@ 60°C. (ASTM D-257-66)	3
ASTM Classification (ASTM D-1755-66)	D1-33

* These values are not to be considered specifications.

** Special Rheological properties are available for specific applications.

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