

Emulsification Curve of Ink F1

Press Performance of Alcohol Substitutes:

Using ink F-1, a commercial printer had experienced lithographic problems when switching from isopropanol as a dampening solution additive to two other additives sold as alcohol substitutes. The problems encountered were tight water balance and flotation on the surface of the water fountain, which at times also caused contamination of the dampening rollers with ink.

Emulsification rate curves were run using the procedure of Surland (4) and are shown in Fig. 1. In this case, the failure of the ink to reach an equilibrium in water uptake with additives A and B is the likely reason for the poorer litho performance. The isopropanol curve shows a more normal equilibrium water takeup and would be expected to perform better on press from a lithographic standpoint.

Figure 1

