



Determination of Cure – WB Marker Test

INTRODUCTION

The purpose of this method is to determine the level of cure of a Release Coating in thin film.

This method is appropriate for radiation curable systems used for Release Coatings. Cure is determined by the absence of migration of the release coating to Scotch 610 tape.

Note: Due to the effects of the pigment in different colors, only purple or red markers are suggested for use in this procedure. If a red marker is used, the same procedure should be followed. However, the red ink does not bead as quickly as the purple ink. If using red ink, monitor the test sample for a longer period of time to determine the level of cure/silicone migration.

PROCEDURE

1. After the silicone coating has been cured, apply a strip of Scotch brand 610 tape to the coated substrate and rub with a finger to ensure good contact between the adhesive and release coatings. Constant pressure should be applied with a 10 count forward and back motion being performed. One count consists of one forward and one backward stroke.
2. Peel the tape from the liner and turn the tape adhesive side up. Mark the strip of tape with the Mr. Sketch marker. If the silicone system is undercured, the ink will quickly begin to bead. Determine the level of cure/silicone migration by comparing the test sample to a control piece of tape that has not been applied to the silicone coating. If silicone migration is present, then the ink beading is more than that of the control piece.
3. The level of cure/silicone migration is rated subjectively on a scale of 0 to 5, with 5 being excellent (no beading), 3 being moderate, and 0 being poor (no cure – wet coating).

