



KODAK RELIABLE IMAGE TIP # 59

What is a Methylene Blue Test (Residual Thiosulfate/Fixer Test)?

Methylene Blue is a test and process that ensures a microfilm processor conforms to industry standards. Performing a Methylene Blue test ensures that the film is being properly washed and ultimately meets **Life Expectancy** standards. If the film is not washed properly or the fixer is not mixed correctly, residual thiosulfate will be present on the film. Where there is thiosulfate there is undeveloped silver halide. Undeveloped silver halide is a potential for silver print-up, formation of redox, and information obliteration caused by the formation of micro blemishes.

If the residual thiosulfate on a piece of clear, processed film is $\geq 1.4 \text{ ug/cm}^2$ the test is a failure, according to ANSI Standard IT 9.17.

The Methylene Blue Method recommended in ISO 18917:1999, *Photography-- Determination of residual thiosulfate and other related chemicals in processed photographic materials--Methods using iodine-amylose, methylene blue and silver sulfide*, is a worldwide standard test to detect residual hypo/fixer.

