



KODAK RELIABLE IMAGE TIP # 64

Definitions

Kodak Brown Toning, Redox and Rewashing

Brown Toning

Is a chemical process that converts the silver halide to silver sulfide. Silver sulfide is much more resistant to air contaminants and high temperatures and humidity. Brown toning can be done in line with processing or to film that has already been processed.

Redox

Redox is colloidal silver, meaning silver that has been oxidized and has migrated to form circular spots. Brown toning will arrest any continued growth of the spots on the original film. However, it will not remove or restore the original silver image.

Rewashing Film

Rewashing microfilm in a processor might remove dirt and finger prints, but it won't fix the redox problem. Kodak highly recommends brown toning the effected film, it will stop redox from spreading. For further information, see Kodak publication A-1671- [Use of Kodak Brown Toner to Extend the life of Microfilm.](#)