

# The Effect of High and Low Humidity on the Quality and Stability of Inkjet Images

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## **Abstract**

We have characterized the effect of low and high humidity on dye-based and pigmented inkjet images stored in the dark. Prints in albums were evaluated unprotected as well as protected with polypropylene sleeves or page protectors. In this work, we have examined the effect of humidity on gloss, dot-gain, sharpness, mottle, and color. Overall, humidity did not have as large an effect on image degradation as initially expected. The primary effect of high humidity was reduced image sharpness due to migration of one color into an adjacent area or into an unimaged area. Migration was greater with RC papers than with cast-coated papers. Pigmented systems showed essentially no migration. Mounting sleeves or page protectors reduced migration in systems where migration was observed. However, we recommend a proper storage environment as the best way to preserve inkjet images.

## **Biography**

Since 1998, Mark Mizen has served as Director of Technology for Creative Memories, the first company to offer consumers photo storage information, products and hands-on assistance. In his position, he is responsible for materials specifications, product testing, and new product development for Creative Memories photo storage system. From 1989 to 1998, Mark worked for 3M and then Imation on various photothermographic imaging systems. Mark Mizen received his Ph.D. in Physical Organic Chemistry in 1990 at the Massachusetts Institute of Technology and his B.S. from the University of Illinois in 1985. Chris Mayhew has worked as an Imaging Specialist in Creative Memories Technology Center since 2001.