

June 9, 2007

Dr. Ajay Pasupuleti  
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Dear Mr. Pasupuleti,

***Report on the Image Stability Test for Silicon/Deposited Aluminum Microfiche***

The basic procedure outlined in ISO 18901 Imaging Materials – Processed Silver Gelatin Black-and-white Films – Specifications for Stability section 8.10 Image Stability Test was followed. A summary of this procedure is as follows:

The microfiche sample, containing textual images created by deposited aluminum on a silicon wafer, was conditioned at 22°C/50% RH for 24 hours. Visual densities were then measured in the broad areas of minimum and maximum density using a Gretag Spectrolino.

The sample was then conditioned at 22°C/60% RH for 24 hours and then heat-sealed in a moisture-proof, metallic-foil envelope. The envelope containing the microfiche sample was placed in an incubation chamber set to 60°C/60% RH for a period of 14 days. Visual density readings were again taken after the sample was removed from the chamber and bag and allowed to recondition for 24 hours to 22°C/50% RH.

This above process was then repeated for an additional 16 days and the final visual densities were read. The visual density readings and associated statistics obtained from the tests are provided in the table below.



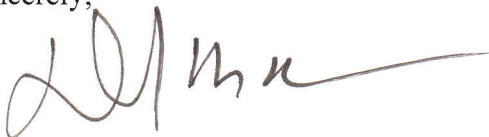
<i>Microfiche Before Incubation</i>	<i>n</i>	Mean	St. Dev.
Aluminum Deposit	5	1.88	0.04
Silicon Wafer	5	3.15	0.07
<i>Microfiche After 14 Days at 60°C</i>			
Aluminum Deposit	5	1.89	0.01
Silicon Wafer	5	3.18	0.09
<i>Microfiche After 30 Days at 60°C</i>			
Aluminum Deposit	5	1.90	0.01
Silicon Wafer	5	3.18	0.02

The conclusion reached is that no significant density changes were observed in either the minimum or maximum density areas of the disc even after 30 days at 60°C/60%RH.

Table 3 in the ISO 18901 standard indicates that for a microfilm/fiche exposed to 60C and 60% RH for 30 days with change in density of no more than 0.05 will be given a Life Expectancy Rating of 500 years. This is the highest rating possible.

A word of caution should be included that this standard was developed and calibrated for silver images on acetate or polyester films. It was not designed or calibrated for aluminum images on silicon wafers. There can be no assurance that the LE-500 rating will prove 100% applicable to this particular product. IPI believes, however, that the performance of this standard is the best approach to preliminary evaluation of this material possible. Future research may be advised.

Sincerely,



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