



TECHNICAL INFORMATION

MIL-I-43553, REVISION A, QUALIFICATION

DEM has completed qualification testing of our 50-Series Legend Inks, 10-Series Legend Inks and M-Series Marking Inks to the recently revised MIL-I-43553 specification.

DEM is pleased to announce that the 10, 50 and M Series Inks meet all applicable requirements of MIL-I-43553, Revision A, as follows:

TYPE 1: M-Series - All available colors with all available catalysts.

50-Series - All available colors with all available catalysts.

 *10-Series - Black, white, and yellow.

TYPE 2: M-Series - Same as Type 1 except for M-O-N, (non-
conductive) M-O-N/SD, M-11-N, and M-12-N. For room temperature cure, use Catalyst B-13 or Catalyst 77.

50-Series - Same as Type 1 except for 50-700R, 50-700R/SD and 50-710R. For room temperature cure, use Catalyst 28 or Catalyst 77.

 *10-Series - Black, white and yellow.

In order to be classified as a Type 2 marking ink, the cured material must have a minimum insulation resistance of 1×10^{12} ohms and at least 1×10^{10} ohms after humidity conditioning.

The pigments contained in M-O-N, M-O-N/SD, M-11-N, M-12-N, 50-700R, 50-700R/SD and 50-710R are slightly conductive and therefore do not meet the Type 2 requirements. Also, inks cured at room temperature for 7 days using Catalyst A or Catalyst 20 did not meet the Type 2 requirements. If a room temperature cure and Type 2 is needed, DEM recommends using Catalyst B-13, Catalyst 28 or Catalyst 77 which all qualify to Type 2.

*Since Hysol 10-Series is a single component ink with the hardeners already mixed in, the following sections of MIL-I-43553, Rev. A do not apply:

- 3.4 Composition
- 3.6 Mixing Properties
- 3.7 Pot Life
- 3.11.7 Storage life (only 6 months for 10-Series)
- 4.4.1 Unit packaging