

**2025 ANNUAL LETTER OF QUALIFICATION
to
COMMERCIAL ITEM DESCRIPTION (CID)
A-A-56032, REVISION D^(Notice-3)
for
M-SERIES MARKING INKS**

This Letter of Qualification applies to all M-Series inks manufactured by MacDermid Enthone.

MacDermid Enthone M-Series inks are not color matched to AMS-STD-595 (previously FED-STD-595) and will not match the color numbers called out in Table II of this specification. The M-Series inks are approximate matches only to the Federal standard colors.

The undersigned certifies that MacDermid Enthone's M-Series inks are qualified to the requirements of CID A-A-56032, Revision D as follows:

Type I: All ink and catalyst combinations tested at the specified cure schedules.

Type II: All ink and catalyst combinations tested at the specified cure schedules.

EXCEPT:

- M-0-N
- Inks cured at room temperature with Catalyst 20/A

Type III: All ink and catalyst combinations tested at the specified cure schedules.

The following ink/catalyst/cure schedule combinations were selected for testing. They are representative of the other colors in the series and comparable results can be expected.

INKS	M-9-N, M-0-N, M-0-NC	
CATALYSTS	Accelerated Air Cure	Catalyst B-13/28
	Basic Air Cure	Catalyst 20/A, Catalyst 77
	Heat Cure	Catalyst 20/A, Catalyst B-3, Catalyst 5, Catalyst 9, Catalyst B-13/28, Catalyst 45, and Catalyst 77
CURE SCHEDULES	Accelerated Air Cure	3 days at room temperature (25°C/77°F)
	Basic Air Cure	5-7 days at room temperature (25°C/77°F)
	Heat Cure	15 minutes at 150°C/300°F

Air cure conditions can vary considerably (temperature, humidity, air flow, etc.). Also ink coating thickness has a greater impact on final properties when using air cures. When possible, a low temperature heat cycle, followed by a full air cure, will ensure product performance. Please contact a MacDermid Enthone Technical Service Representative for additional information.

Product shelf life is warranted 1080 days from the date of manufacture on all inks and for 720 days from date of manufacture on all catalysts.



Isaac Contreras
Technical Service Engineer, January 15, 2025