

MIL-P-85891A
 AMMENDMENT 3
12 May 2000
SUPERSEDING
 AMENDMENT 2
 26 Jun 1998

MILITARY SPECIFICATION

PLASTIC MEDIA FOR REMOVAL OF ORGANIC COATINGS

This amendment forms a part of MIL-P-85891A, dated 1 April 1992, and is approved by all Departments and Agencies of the Department of Defense.

PAGE 1

1.1: In the first line, delete "seven" and substitute "eight".

1.2.1: Add new type:

"Type VIII - "Nanocomposite"

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1.2.2 Add new color no:

"8 Type VIII - multicolored"

1.2.3 Add to the note: "Type VIII shall always be multicolored"

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3.2 First sentence: After "(for Type VI)" delete or", insert comma, and after "(for Type VII)", insert "or an Urea/Melamine Amino Thermoset plastic with composite and nano-structured particle reinforcement (for Type VIII)".

3.2 Second sentence: After "no inorganic fillers" add "(excluding Type VIII)".

3.2.1 Add values for Type VIII to the tabulated list, in the "Barcol Hardness" and "Approx. MOH hardness" columns, respectively, as shown:

"Type VIII	54 to 62	3.5"
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3.2.2 Add to list:

"Type VIII Multicolored"

3.2.3 Third sentence: Change "Figures 1 through 7,..." to read "Figure 1 through 8,..."

3.2.3 Last sentence: Add to end of sentence "except for Type VIII".

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3.5 CHECK PARTICLE SIZE USED

3.5.1 First sentence: Change to read, "Types I thru IV, VI and VIII shall not produce a surface residue which interferes with application of MIL-C-81706 aluminum chromate conversion coating".

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Table I: Delete table I and replace with new table as follows:

Table I. Physical and chemical properties

Property	Requirement by Type								Test Para.
	I	II	III	IV	V	VI	VII	VIII	
Chlorine Content (ppm), Max.	Trace	Trace	Trace	Trace	Trace	Trace	Trace	Trace	4.5.3
Ash Content, Max. (% by weight)	1.0	2.0	2.0	2.0	0.5	0.5	1.0	2.0	4.5.4
Iron Content, Max. (% by weight)	0.05	0.10	0.10	0.10	0.05	0.05	0.05	0.10	4.5.4.1
Specific Gravity Minimum	1.15	1.47	1.47	1.47	1.10	1.28	1.38	1.36	4.5.5
Maximum	1.25	1.52	1.52	1.52	1.20	1.33	1.43	1.46	
Extract Content, Max. (% by weight)	5.0	1.0	1.0	1.0	1/	1.0	10.0 2/	1.0	4.5.6
pH of Water Extract Minimum	4	4	4	4	4	4	4	4	4.5.7
Maximum	8	8	8	8	8	8	8	8	
Conductivity, (umho/cm, max.)	100	100	100	100	100	100	100	100	4.5.7
Water Absorption (% by weight, max.)	2.0	10.0	10.0	10.0	2.0	2.0	15.0	10.0	4.5.8
Heavy Particulates (% by weight, max.)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	4.5.9
Light Particulates (% by weight, max.)	0.1	1.0	1.0	1.0	0.1	0.1	1.0	1.0	4.5.9

Table II: Delete table III and insert new table III as follows:

Table III. Performance characteristics.

Property	Requirement by Type								Test Para.	
	I	II	III	IV	V	VI	VII	VIII		
<u>Blast Parameters</u>										
Nozzle pressure (psi) 1/	50	25	25	25	30	25	45	25		4.5.11
Feed rate (lbs/hr)	215-245	140-170	125-155	140-170	140-170	130-160	400-450	600-720		
<u>Property</u>										
Stripping rate Sq ft/minute (min.)	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015		4.5.11.1
Aggressiveness Mg/sq. cm. (max.)	0.20	0.50	3.00	0.50	0.20	0.75	0.25	0.25		4.5.11.2
Consumption % for 4 cycles (max.)	80	52	52	52	24	60	70 2/	20 3/		4.5.11.3

Notes:

1/ Air pressure in the hose immediately adjacent to the nozzle as measured with a hypodermic needle.

2/ Consumption rate is based on 50 mesh screen.

3/ Consumption rate is based on a 60 mesh screen.

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6.6: Second sentence: Delete "Type IV, VI and VII" and substitute "Type IV, VI, VII and VIII".

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6.7: Add identifier as follows:

"Type VIII - 8"

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Insert Figure 8 as the last page of this document.