

INCH-POUND

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SUPERSEDING  
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**PERFORMANCE SPECIFICATION**  
**COATING SYSTEM, ADVANCED PERFORMANCE,**  
**FOR AEROSPACE APPLICATIONS**

This specification is approved for use by all Departments and Agencies of the Department of Defense.

**1. SCOPE**

**1.1 Scope.**

This specification establishes the requirements for coating systems having high durability for use as aircraft exterior surface finishes. These coating systems normally are comprised of a surface treatment, a primer, and a topcoat and include a chemical stripper and a cleaning compound for topcoat washing.

**1.2 Application.**

Coating systems are qualified for use on external surfaces of military aircraft but are not limited to such application. If the coating systems qualified to this specification are to be used on other than external surfaces, further testing will be required for the specific application.

Comments, suggestions, or questions on this document should be addressed to AFLCMC/EZSS, 2145 Monahan Way, Bldg. 28, and Wright-Patterson AFB, OH, 45433-7017 or emailed to [Engineering.Standards@us.af.mil](mailto:Engineering.Standards@us.af.mil). Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <https://assist.dla.mil/>.

AMSC N/A

FSC 8010

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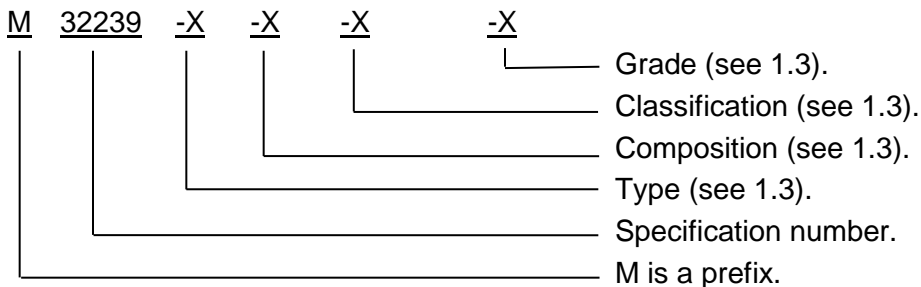
**1.3 Classification.**

The coating systems under this specification consist of the following types, compositions, classes, and grades (see 6.2).

Type 1	Skydrol LD-4 resistance.
Type 2	No Skydrol LD-4 resistance.
Composition 1	Coating system containing chromium compounds.
Composition 2	Coating systems containing magnesium particles.
Composition 3	Coating system containing lithium based compounds.
Composition 4	Coating systems containing magnesium oxide compounds.
Composition 5	Coating systems containing rare earth compounds.
Class 1	Standard flexibility coating system.
Class 2	High flexibility coating systems.
Class 3	Low flexibility.
Grade 1	Standard pigmented coating systems.
Grade 2	Low-infrared (IR) pigmented coating systems.

**1.3.1 Part or Identifying Number (PIN).**

PINs to be used for the coating system acquired to this specification are created as follows:



**1.4 Colors.**

Coating systems should be furnished in all colors and gloss ranges and should conform to SAE-AMS-STD-595. Colors not in conformance with SAE-AMS-STD-595 should be furnished as specified by the procuring activity.

**1.5 Safety-hazardous materials.**

While the materials, methods, applications, and processes described or referenced in this specification may involve the use of hazardous materials, this specification does not address the hazards which may be involved in such use. It is the sole responsibility of the user to ensure familiarity with the safe, proper use, and disposal of any hazardous materials and to take precautionary measures necessary to protect the health and safety of all personnel involved.

**2. APPLICABLE DOCUMENTS**

**2.1 General.**

The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified