



<b>AEROSPACE MATERIAL SPECIFICATION</b>	<b>AMS3143™</b>	<b>REV. C</b>
	Issued 1999-03 Revised 2022-09	
	Superseding AMS3143B	
(R) Powder Coating Material		

## RATIONALE

Revision constitutes a Five-Year Review update along with several technical changes to accommodate use by USAF.

### 1. SCOPE

#### 1.1 Form

This specification establishes requirements for thermoset protective coatings in powder form.

#### 1.2 Application

The powder coating materials covered by this specification are typically used, without primer, on metallic or electrically conductive substrates as a protective coating to provide corrosion protection and functional fluid resistance, but usage is not limited to such applications. Type 1 and Type 2 are suitable for use in a service temperature range from -65 to +275 °F (-54 to +135 °C). Type 3 is suitable for use in a service temperature range of -65 to +1200 °F (-54 to 649 °C).

#### 1.3 Classification

The powder coating materials covered by this specification are classified as follows:

- Type 1 Applicable for interior surfaces.
- Type 2 Applicable for interior and exterior surfaces.
- Type 3 Applicable for interior and exterior high temperature surfaces (1200 °F (649 °C) maximum).
  
- Class 1 No restrictions on maximum temperature reached by substrate during coating cure.
- Class 2 275 °F (135 °C) maximum temperature reached by substrate during coating cure.
  
- Grade 1 No Skydrol resistance required.
- Grade 2 Skydrol resistance required.

NOTE: If Type is not specified, Type 2 shall be assumed. If Class is not specified, Class 2 shall be assumed. If Grade is not specified, Grade 1 shall be assumed.

#### 1.4 Safety - Hazardous Materials

While the material, 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 and proper use of any hazardous materials and to take necessary precautionary measures to ensure the health and safety of all personnel involved.

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