



# AEROSPACE MATERIAL SPECIFICATION

**Society of Automotive Engineers, Inc.**  
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## AMS 3640B

Superseding AMS 3640A

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### PLASTIC MOLDINGS Melamine-Formaldehyde, Mineral Filled

1. ACKNOWLEDGMENT: A vendor shall mention this specification number and its revision letter in all quotations and when acknowledging purchase orders.

2. FORM: Compression or transfer moldings.

3. APPLICATION: Primarily for use in electrical systems as ignition rotors and terminal blocks, where a material of high arc resistance, dielectric strength, and heat resistance is required.

4. TECHNICAL REQUIREMENTS:

4.1 General:

4.1.1 Color and Condition: Unless otherwise specified, a brown to gray, opaque material with a lustrous finish shall be furnished.

4.1.2 Weathering: When specified, the product shall have weather resistance acceptable to the purchaser as determined by a procedure agreed upon by purchaser and vendor.

4.1.3 Corrosion: The product shall not have a corrosive effect on other materials when exposed to conditions normally encountered in service. Discoloration of metal shall not be considered objectionable.

4.2 Properties: The product shall conform to the following requirements; tests shall be performed on the product supplied and in accordance with the issue of specified ASTM methods listed in the latest issue of AMS 2350, insofar as practicable.

∅ 4.2.1	Flexural Strength, psi, min	8000	ASTM D790
4.2.2	Impact Strength (Notched Izod), ft-lb per in. of Notch, min	0.275	ASTM D256, Method A
4.2.3	Dielectric Strength, short time test, v per mil, min		ASTM D149; test specimen to be molded disc 0.075 in. thick by 4 in. in diameter
	73 F ± 5 (22.8 C ± 2.8)	400	
	212 F ± 2 (100 C ± 1.1)	350	
4.2.4	Arc Resistance, sec, min	120	ASTM D495
4.2.5	Water Absorption in 24 hr, %, max	0.15	ASTM D570
4.2.6	Specific Gravity, 77 F/77 F (25 C/25 C), max	2.20	ASTM D792, Method A
4.2.7	Shrinkage, in. per in., max	0.002	Bake 0.075 x 4 in. diameter disc for 8 hr at 220 F ± 2 (104.4 C ± 1.1)

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