



AEROSPACE MATERIAL SPECIFICATION

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Fused Filament Fabrication,
Type 1, Class 1, Form 1, Grade 0,
Natural Color Material for

RATIONALE

This slash sheet is intended to define the product specific requirements for Type 1, Class 1, Form 1, Grade 0, natural color fused filament fabrication (FFF) feedstock. No such document currently exists.

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Documents

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1. SCOPE

This slash sheet defines product specific requirements and allows the procurement of a fused filament fabrication (FFF) feedstock for which a publicly available material database has been generated by the National Center for Advanced Materials Performance (NCAMP). The feedstock currently defined by this specification is listed in Table 1. The complete requirements shall consist of this document and the issue in effect of AMS7101.

Table 1 - Feedstock identification

Classification	Product Designation	Manufacturer	Resin Specification
Type 1, Class 1, Form 1, Grade 0, Natural Color	Stratasys ULTEM™ ⁽¹⁾ 9085 Certified Grade	Stratasys, Inc. 6855 Shady Oak Rd. Eden Prairie, MN 55344	SSYS 300001-0001 Rev B (manufacturer proprietary ⁽²⁾)

⁽¹⁾ ULTEM™ is a registered trademark of Sabic or affiliates.

⁽²⁾ The resin specification was established to control a portion of the material manufacturing cycle and is proprietary due to sensitive processing information. It is provided herein to ensure upstream controls; if access to the specification is required, please contact the manufacturer directly.

2. REFERENCES

2.1 Applicable Documents

The issue of the following documents in effect on the date of the purchase order form a part of this specification to the extent specified herein. The supplier may work to a subsequent revision of a document unless a specific document issue is specified. When the referenced document has been cancelled and no superseding document has been specified, the last published issue of that document shall apply.

2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +001-724-776-4970 (outside USA), www.sae.org.

AMS7101 Fused Filament Fabrication, Material for

2.1.2 ASTM Publications

Available from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959, Tel: 610-832-9585, www.astm.org.

ASTM D1238 Standard Test Method for Melt Flow Rates of Thermoplastics by Extrusion Plastometer

ASTM D7191 Standard Test Method for Determination of Moisture in Plastics by Relative Humidity Sensor

ASTM E1356 Standard Test Method for Assignment of the Glass Transition Temperatures by Differential Scanning Calorimetry

2.1.3 Other Publications

National Center for Advanced Materials Performance Wichita State University - NIAR 1845 Fairmount Ave., Wichita, KS 67260-0093, USA, <https://www.wichita.edu/research/NIAR/>.

NMS 085 NCAMP Material Specification, Stratasys Inc. ULTEM™ 9085 Resin

NMS 085/1 NCAMP Material Specification, Stratasys Inc. ULTEM™ 9085 Resin