



STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

WSS-M99P1111-A

1. SCOPE

This document defines the standard requirements for Production Materials.

2. APPLICATION

The following requirements apply to all Production Materials except as noted.

2.1 Definitions

2.1.1 Production Material

A dimensional or non-dimensional material that is used for the fabrication of complete vehicles marketed by Ford.

2.1.2 Worldwide Product Engineering Materials Approved Source List (ASL)

The ASL catalogs materials that have been approved against referenced Material Specifications. It identifies suppliers, products, and includes information on the toxicology and environmental approval of each material. The Approved Source List can be found at www.MATS@ford.com.

3. REQUIREMENTS

Substance restrictions imposed by regulations or Company direction applies to the materials addressed by this document. The restrictions are identified in the Restricted Substance Management Standard WSS-M99P9999-A1.

3.1 QUALITY SYSTEM REQUIREMENTS

Material suppliers and part producers must conform to the Company's Quality System Requirements.

3.2 APPROVAL OF MATERIALS

Suppliers desiring approval of their materials shall first obtain an expression of interest from Purchasing, Design or Product Development, and Materials Engineering. The supplier shall submit a completed copy of their laboratory test reports, signed by a qualified and authorized representative of the test facility, demonstrating full compliance with all the requirements of the Material Specification. Tested material samples must be available for review upon request and kept for a minimum of one year. Upon request, the supplier will review the associated quality control documents (Process Failure Mode and Effects Analysis, Control Plans, Certification testing) with Ford.

3.3 APPROVED MATERIAL USAGE

Approved Materials are those that appear on the ASL and must meet the specification for which they are listed.

When a Ford Engineering Material Specification is used, only the materials on the ASL shall be selected and those materials must come from the listed suppliers.

Date	Action	Revisions	Rev. 3
2012 04 04	Revised	See Summary of Revisions	GMFS
2012 01 31	Revised	See Summary of Revisions	GMFS
2002 06 10	Activated		A Cockman



3.4 INFRARED SPECTROPHOTOMETRY AND/OR THERMAL ANALYSIS (Applies to Non-Metallic Materials)

Ford Motor Company, at its discretion, may establish and maintain IR spectra and thermograms for initial approval of materials such as, but not limited to, plastics and elastomers.

When established, these IR spectra and thermograms shall constitute the reference standard and shall be kept on file at the designated material laboratory. The material supplier shall ensure that all future material supplied to the specification shall produce IR spectra and thermograms that correspond to the reference standard when tested under the same conditions.

3.5 CONDITIONING AND TEST CONDITIONS (Applies to Non-Metallic Materials)

All test values are based on material conditioned in a controlled atmosphere of 23 +/- 2 °C and 50 +/- 5% relative humidity for not less than 24 h prior to testing and tested under the same conditions unless otherwise specified.

3.6 ADDITIONAL REQUIREMENTS

Requirements beyond those explicitly stated in this document and the material specification may be specified on the Engineering drawing, Engineering specification (ES), performance specification, System Design Specification (SDS) and/or Attribute Requirement List (ARL).

3.7 SUPPLIER'S ONGOING RESPONSIBILITY

All materials must be equivalent in all characteristics to the material upon which approval was originally granted.

Prior to making any changes to the material originally approved, whether or not such changes affect the material's ability to meet the specification requirements, the supplier shall notify the affected Supplier Technical Assistance (STA), Purchasing, and Materials Engineering activities of the proposed changes (with reasons) by submission of a completed Suppliers Request for Engineering Approval, SREA.

For parts and components using Ford Material Specifications all samples tested to the Ford Performance specifications for Design Verification (DV), Production Verification (PV) and Production Part Approval Process (PPAP) sign off must be kept until Job 1.

3.8 REGRIND FOR POLYMERIC MATERIALS

Follow CAD and Drafting Standard E-4 for requirements and identification of regrind content.

4. GENERAL INFORMATION

This information given below is provided for clarification and assistance in meeting the requirements of this specification. Contact gmfs@ford.com for questions concerning Engineering Material Specifications.