



ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

PAINT PERFORMANCE, PLASTIC SUBSTRATES, INTERIOR

WSK-M2P144-A

1. SCOPE

This specification defines the performance requirements for paint films on plastic substrates for interior use.

2. APPLICATION

This specification was released originally to define paint performance requirements for various painted interior applications such as instrument panel coverings, glove box lids, pillar coverings, etc.

3. REQUIREMENTS

3.1 STATISTICAL PROCESS

Suppliers must conform to the requirements of Ford Quality System Standard Q-101. A mutually acceptable Control Plan as described therein is required for material/source approval. Appropriate statistical tools must be used to analyze process/product data so that variation in the final product is continuously reduced.

3.2 CONDITIONING AND TEST CONDITIONS

All test values indicated herein 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.

3.3 SYSTEM COMPONENTS

3.3.1 Substrate

ABS, Polycarbonate, Polypropylene or as specified on Engineering Drawing.

3.3.2 Plastic Preparation (see also 5.1)

The surface to be painted shall be cleaned by an acceptable process, e.g. power wash, to remove mold releasing agents, fingerprints, oils, dirt and moisture.

3.3.3 Primer

Where necessary in order to meet the requirements of this specification, an adhesion primer, primer surfacer or primer sealer must be used or as specified on Engineering Drawing.

Date	Release No.	Release/Revision
1991 01 02	CO1089480	Released KPM, KW conc. J.Schult

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3.3.4 Top Coat

Suitable to meet the requirements of this specification or as specified on Engineering Drawing.

3.3.5 Film Thickness

As specified in applicable paint Material Specification.

3.3.6 Ageing

Test panels or test specimens prepared for investigations according to this specification must be aged for at least 72 hours at 23 +/- 2 C or 16 hours at 45 +/- 1 C prior to testing.

3.3.7 Production Paint Repair

Repaired areas must meet the requirements of this specification. All repair materials and processes used must be approved by the affected Product Engineering Office. Maximum film thickness for repaired parts will be specified in the mutually agreed control plan.

3.4 APPEARANCE

Color, gloss, grain and surface finish shall match master Trim Sample and/or Master Appearance Sample as approved by Design. The painted areas shall be opaque on clear plastic parts which are backlighted or edge lighted.

3.4.1 Color

(FLTM BI 109-01)

See approved sample

3.4.2 Gloss

(FLTM BI 110-01, 60 deg glossmeter)

See approved sample

3.5 RESISTANCE PROPERTIES

3.5.1 Adhesion

(FLTM BI 106-01, Method B)

Grade 0

3.5.2 Water Immersion Test

(FLTM BI 104-01)

96 h

No blistering, softening, dulling, color change or loss of adhesion per 3.5.1.

3.5.3 Resistance to Water and

Soap Spotting, max discoloration
(FLTM BI 113-01)

Rating 4-5

Evaluation according to the AATCC Scale.

No film softening allowed.