



ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

PRIMER, WATERBORNE ANODIC ELECTROCOAT, 22 MICROMETRE
FILM BUILD, 175 C BAKING, INITIAL FILL

WSK-M64J31-A1

MAKEUP FEED, WATERBORNE ANODIC ELECTROCOAT

WSK-M64J31-A2

1. SCOPE

The materials defined by these specifications are anodic electrocoat primer and associated make-up feed material for nominal 22 micrometre film build.

2. APPLICATION

These specifications were released originally for a paint system used as anodic electrocoat primer on phosphated small parts. It will either be followed by primer surfacer and exterior enamel colour coat or be used as single coat on non visible parts.

3. REQUIREMENTS

WSK-M64J31-A1: The anodic electrocoat primer shall meet all detailed requirements of this specification.

WSK-M64J31-A2: The make-up feed materials shall meet the requirements of para 3.4. When feed material is used in production, the resultant primer shall meet all detailed requirements of this specification.

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 continually reduced.

3.2 INFRARED SPECTROPHOTOMETRY AND/OR THERMAL ANALYSIS

Ford Motor Company, at its option, may conduct infrared and/or thermal analysis of material/parts supplied to this specification. The IR spectra and thermograms established for initial approval shall constitute the reference standard and shall be kept on file at the designated material laboratory. All samples shall produce IR spectra and thermograms that correspond to the reference standard when tested under the same conditions.

Date	Release No.	Release/Revision
1991-01-02	C01089480	Released KW conc. J.Schult

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3.3 CONDITIONING

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.

3.4 MATERIAL PROPERTIES

3.4.1 Density (ASTM D 1475) see Initial Sample +/- 0,05 g/mL

3.4.2 Non-volatile (FLTM BI 120-08) see Initial Sample +/- 1 %

3.4.3 Weight Loss after baking (FLTM BI 120-15) see Initial Sample +/- 1 %

Baking: 10 minutes at 175 C metal temperature.

3.4.4 Solvent Emissions, max. (ASTM D 3960) 0,096 kg/L

This requirement is as determined by the United States Environmental Protection Agency Reference Method #24 but is only applicable to materials used in the USA.

3.5 STABILITY

3.5.1 Pumping Stability (FLTM BI 120-04 or equivalent equipment) 14 days

After 14 days stirring, the bath material shall meet all requirements of this specification.

3.5.2 Storage Stability: 2 months

During a storage of 2 months between 5 and 32 C temperature the make-up feed materials as supplied shall not settle up or cake insoluble.

3.6 PREPARATION OF TEST PANELS (FLTM BI 103-02 B,b)

3.6.1 Substrate:

Zinc phosphated Test panels prepared in accordance with Ford Manufacturing Standard U-MA18004/U-MA18005.

3.6.2 Electrocoat Primer: (FLTM BI 120-01)

Electrocoat bath temperature: 22 +/- 2 C.

Dry film thickness: 20 - 24 micrometre.

Baking condition: 10 minutes at 175 C