



## ENAMEL, AIR DRYING, WATER REDUCIBLE, LOW GLOSS BLACKOUT, LOW VOC

WSS-M1J215-A

### 1. SCOPE

The material defined by this specification is a chrome-free low gloss blackout air-dry or force-dry water reducible paint with low VOC content.

### 2. APPLICATION

This specification was released originally for material used as a cosmetic blackout paint low-visibility/non-visible exterior body surfaces. It shall be suitable for use in wheel-well areas and underbody surfaces. This material is not designed for use over bare metal.

### 3. REQUIREMENTS

#### 3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

#### 3.3 MATERIAL COMPATIBILITY

The supplier of this material shall keep abreast of changes in technology of related materials which may affect the compatibility and performance of this product. In the advent of adverse performance, the supplier must notify the Ford Product Release Office in writing.

#### 3.4 COMPOSITION

The material shall be composed of a suitable blend of resins, pigments, and solvents properly balanced to produce the color, gloss, and resistance requirements of this specification.

#### 3.5 PHYSICAL PROPERTIES

|       |                                                        |                              |
|-------|--------------------------------------------------------|------------------------------|
| 3.5.1 | Non-volatile Content, min<br>(FLTM BI 102-01)          | Initial Sample +/- 2%        |
| 3.5.2 | Volatile Organic Content (VOC), max .<br>(ASTM D 2369) | 05 kg/L (minus water)        |
| 3.5.3 | Weight per Volume<br>(ASTM D 1475)                     | Initial Sample +/- 0.05 g/mL |

| Date       | Action    | Revisions                                            |
|------------|-----------|------------------------------------------------------|
| 2007 12 17 | Revised   | Updated Format, No Technical Change                  |
| 2003 06 10 | Revised   | Para 3.0 inserted; para 3.1, 3.2, 3.12 and 4 deleted |
| 1997 02 27 | Activated |                                                      |



Documents

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### 3.5.4 Viscosity (FLTM BI 111-01, # 4 Ford Cup)

Final approval of a specific material viscosity for production shipments shall be made by the affected manufacturing activity. In all cases, the viscosity shall be within specification limits as identified in the control plan.

The viscosity tolerance for any one supplier shall be +/- 10 sec, based on the recorded viscosity of the original approved production sample.

### 3.5.5 Stability

The material shall be stored at temperatures below 40 °C away from heat and sunlight. Under these storage conditions, the shelf life of the material shall be 90 days.

### 3.5.6 Hiding Power, Dry (FLTM BI 001-05)

|                 |                                |
|-----------------|--------------------------------|
| . Viscosity     | Supplier Recommended Viscosity |
| . Reducer Water |                                |

Complete dry hiding over substrate at maximum dry film thickness of 15 micrometers.

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

Test panels shall be prepared using WSB-M1A250 galvanized steel zinc phosphated and conforming to the requirements of WSK-3P1-C. Candidate blackout enamel will be tested over currently approved production electrocoats, primers, topcoats and sealers, topcoat colors tested should include white and red. Application and film thickness of these materials as specified in the relevant material specification.

Blackout Application:

|       |                                          |                  |
|-------|------------------------------------------|------------------|
| 3.6.1 | Film Thickness, min.<br>(FLTM BI 117-01) | 25.4 micrometers |
|-------|------------------------------------------|------------------|

### 3.6.2 Drying

|         |                                                                                           |
|---------|-------------------------------------------------------------------------------------------|
| 3.6.2.1 | Allow panels to air-dry 72 hours at R.T. prior to testing resistance and chip properties. |
|---------|-------------------------------------------------------------------------------------------|

|         |                                                          |
|---------|----------------------------------------------------------|
| 3.6.2.2 | Air-dry 30 minutes at R.T. - coating shall be tack-free. |
|---------|----------------------------------------------------------|