PAINT PERFORMANCE, METAL SUBSTRATES, HEAT RESISTANT COATING, LOW VISIBILITY, 250 °C, max — **WSS-M2P170-B1**

PAINT PERFORMANCE, METAL SUBSTRATES, HEAT RESISTANT COATING, MODERATE VISIBILITY, 250 °C, max — **WSS-M2P170-B2**

PAINT PERFORMANCE, METAL SUBSTRATES, HEAT RESISTANT COATING, LOW VISIBILITY, 450 °C, max — **WSS-M2P170-B3**

PAINT PERFORMANCE, METAL SUBSTRATES, HEAT RESISTANT COATING, MODERATE VISIBILITY, 450 °C, max — **WSS-M2P170-B4**

PAINT PERFORMANCE, METAL SUBSTRATES, HEAT RESISTANT COATING, LOW VISIBILITY, 650 °C, max — **WSS-M2P170-B5**

PAINT PERFORMANCE, METAL SUBSTRATES, HEAT RESISTANT COATING, MODERATE VISIBILITY, 650°C, max — **WSS-M2P170-B6**

PAINT PERFORMANCE, METAL SUBSTRATES, HEAT RESISTANT COATING, HIGH VISIBILITY, 450°C, max — **WSS-M2P170-B7**

1. SCOPE

These specifications define the minimum heat and corrosion performance requirements for chassis and engine components.

2. APPLICATION

WSS-M2P170-B1: To be used on non-visible engine brackets, brake components, and exhaust hangers where operating temperatures do not exceed 250 °C.

WSS-M2P170-B2: To be used on moderately visible engine brackets, drums, rotors, and calipers where operating temperatures do not exceed 250 °C.

WSS-M2P170-B3: To be used on non-visible cold-end exhaust components, such as exhaust hangers, where corrosion protection is desired and where operating temperatures do not exceed 450 °C.

WSS-M2P170-B4: To be used on moderately visible cold-end exhaust components, such as muffler rear heads and tail pipes, where operating temperatures do not exceed 450 °C.

WSS-M2P170-B5: To be used on non-visible hot-end exhaust components, such as catalyst hardware, where exceptional heat and corrosion protection properties are required. Temperature resistance is 650 °C maximum.

WSS-M2P170-B6: To be used on moderately visible hot-end exhaust components, such as exhaust manifold components, where exceptional heat and corrosion protection properties are required. Temperature resistance is 650 °C maximum.

Date	Action	Revisions	Rev. 04
2013 10 18	Editorial	See Summary of Revisions	C. Mracna, NA
2013 02 18	Revised	Added Sec. 3.4.4	C. Mracna, NA
2009 03 17	Activated	Activated B1, B2, B3, B4, B5, B6	C. Mracna, NA

Controlled document at www.MATS.ford.com
Copyright © 2013, Ford Global Technologies, LLC
Licensee=/, User=, Not for Resale,
Copyright Ford Motor Company
Provided by IHS Markit under license with FORD
No reproduction or networking permitted without license from IHS
Full document details: FORD WSS-M2P170-B3 2013
Documents Document Sharing Hub

WSS-M2P170-B7: To be used on highly visible cold-end exhaust components, such as decorative exhaust tips, where corrosion protection is desired and operating temperatures do not exceed 450 ℃.

3. REQUIREMENTS

3.1 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS

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

3.2 SUBSTRATE PROPERTIES

3.2.1 Substrate

As specified on the Engineering Drawing. Except for Chip Resistance, all requirements of these specifications must be validated with actual production intent components.

3.2.2 Metal Preparation

All surfaces to be coated must be free from oil, grease, rust and other foreign materials. Phosphating or other surface preparations must comply with the coating manufacturer's recommendations.

3.3 FILM PROPERITES

3.3.1	Color	As specified on Engineering Drawing

3.3.2 Initial Hardness

The finish shall be sufficiently cured at the time of packing to withstand normal handling and shipping without damage.

3.3.3 Adhesion
(ASTM D3359)

Method A, X-cut Tape Test	4A or better
Method B, Cross-Cut Tape Test	4B or better

Available surface area and contour of the component determines which method to use. If both methods are suitable, then Method B is preferred. When using Method A, a minimum of three X-cuts per part is required to increase sampling area.

Adhesion tests to be performed 24 hours after curing, per manufacturer's recommendation. For air dry coatings, age samples for 72 hours prior to the adhesion test.

3.3.4 Film Thickness
(FLTM BI 117-01, ASTM B487)

Coating thickness must be sufficient to meet all the performance requirements of these specifications. Minimum coating thickness must be listed on the print and should be based on production intent parts.

Example: Company X High Temp Paint 123 per WSS-M2P170-B1, 20 µm min.

Documents
Document Sharing Hub

Copyright Ford Motor Company
Provided by IHS Markit under license with FORD
No reproduction or networking permitted without license from IHS
Full document details: FORD WSS-M2P170-B3 2013

Copyright © 2013, Ford Global Technologies, LLC
Licensee=/, User=,
Not for Resale,