



PHOSPHATE COATING, LIGHT

WSS-M3P36-A1

PHOSPHATE COATING, HEAVY

WSS-M3P36-A2

1. SCOPE

These specifications define a phosphate coating applied to automotive components.

2. APPLICATION

These specifications were released originally for a coating generally specified for steel parts where good adhesion and intermediate corrosion resistance is required. The coating provides a clean, grease-free surface for painting, improves adhesion of the paint film, and inhibits the spread of corrosion when the paint film is broken. Parts phosphated in accordance with WSS-M3P36-A2 may be oiled instead of painted to provide short-term rust protection.

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 PHYSICAL PROPERTIES

3.2.1 Coating Weight (FLTM AQ 101-01, AQ 101-02, or AQ 101-03)

Note: When phosphate solutions with high Nickel or Manganese contents are in use, the chromic acid test (FLTM AQ 101-01) should be used.

3.2.1.1 Coating weights (dip or spray system), min.

A1 All substrates	1.5 g/m ²
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A2 All substrates	11.0 g/m ²
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3.2.2 Crystal size, max 25 microns

Measurements conducted with 1000 magnification SEM's.

Date	Action	Revisions	Rev 01
2013 01 09	Revised	Removed test method from Sec. 3.3	C. Mracna, NA
2003 08 14	Activated		J. M. Kovacs

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3.3 RESISTANCE PROPERTIES

Adhesion (bend test)
(FLTM BI 009-05)

No loss of adhesion at bend

3.4 CORROSION PROTECTION

By agreement between Ford and the supplier, parts phosphated in accordance with this specification may be oiled to provide short-term rust protection during shipment.

3.5 PAINT APPLICATION

If the phosphate coating is being utilized as a base for paint then the paint shall be applied immediately following the phosphate application.

4. GENERAL INFORMATION

The 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.

5. SUMMARY OF REVISIONS

2013 01 09 Removed test method from Sec. 3.3