Ford Motor Company

# ENGINEERING MATERIAL SPECIFICATION

| Material Name | Specification Number |
|---|---|
| **PHOSPHATE SOLUTION, ZINC, MAKE-UP MANGANESE** | **WSS-M3B72-A1** |
| **PHOSPHATE SOLUTION, ZINC, MAKE-UP NICKEL** | **WSS-M3B72-A2** |
| **PHOSPHATE SOLUTION, ZINC, MAKE-UP ZINC** | **WSS-M3B72-A3** |
| **PHOSPHATE SOLUTION, ZINC, MAKE-UP FLUORIDE** | **WSS-M3B72-A4** |
| **PHOSPHATE SOLUTION, ZINC, MAKE-UP IRON** | **WSS-M3B72-A5** |
| **PHOSPHATE SOLUTION, ZINC, MAKE-UP COPPER** | **WSS-M3B72-A6** |

## 1. SCOPE

The materials defined by these specifications are aqueous solutions containing key metal constituents for the phosphate bath.

## 2. APPLICATION

These specifications were released originally for materials used as make-up materials in the dip phosphate bath when the metal level in the bath needs to be raised.

## 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 COMPOSITION

Supplier must maintain the following characteristics to a maximum tolerance of +/- 5 % of the initial sample or as reported with the initial sample. All other essential components must be reported with the initial sample and maintained as part of the Control Plan.

3.2.1 Chemical Composition

WSS-M3B72-A1

| | |
|---|---|
| Manganese | Initial Sample<br>+/- 5 % |

WSS-M3B72-A2

| | |
|---|---|
| Nickel | Initial Sample<br>+/- 5 % |

WSS-M3B72-A3

| | |
|---|---|
| Zinc | Initial Sample<br>+/- 5 % |

| Date | Action | Revisions | |
|---|---|---|---|
| 2002 08 28 | Revised | Updated and renumbered | |
| 2000 07 14 | | Added A6 | N. Chamberlain/A. Reilly |
| 1997 11 21 | Activated | | N. Chamberlain |



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-M3B72-A4 2002

Copyright © 2002, Ford Global Technologies, Inc.
Licensee=/, User=,
Not for Resale,

| | | |
|---|---|---|
| WSS-M3B72-A4 | | |
| | Fluoride | Initial Sample<br>+/- 5 % |
| WSS-M3B72-A5 | | |
| | Iron | Initial Sample<br>+/- 5 % |
| WSS-M3B72-A6 | | Initial Sample |
| | Copper | +/- 5 % |

### 3.3 RESISTANCE PROPERTIES

The material defined by this specification must be used with a phosphate system and in conjunction with the phosphate system must meet the requirements of WSS-M3P1-D.

### 3.4 MATERIAL COMPATIBILITY

The material must be compatible with all related materials, i.e., electrocoats, sealers, and adhesives. 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. The supplier shall notify the appropriate Ford Product Materials Engineering Office in writing when incompatibility is anticipated.



--`,,```,,,,````-`-`,,`,,`,`,,`---

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-M3B72-A4 2002

Copyright © 2002, Ford Global Technologies, Inc.
Licensee=/, User=,
Not for Resale,