

ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

PHOSPHATE SOLUTION, ZINC, MAKE UP

ESK-M5B352-A

1. SCOPE

The material defined by this specification is an aqueous solution containing essentially zinc phosphate.

2. APPLICATION

This specification was released originally for material used as make-up material in spray only phosphate equipments. In general this material is used in combination with ESK-M5B351-A Phosphate Solution, Zinc, Start-Up, with ESK-M5B353-A and ESK-M5B354-A Phosphate Solution, Zinc, Accelerator, SKM-5B9580-A Phosphate Solution, Zinc, Passivating Solution and after the application of ESK-M5B355-A Phosphate Solution, Zinc, Alkaline Cleaner.

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 CHEMICAL COMPOSITION

Zinc as Zn:	5.6 +/- 1.2 %
Manganese as Mn:	1.0 +/- 0.4 %
Nickel as Ni:	0.9 +/- 0.4 %
Phosphate at P ₂ O ₅ :	16.5 +/- 2.5 %
Nitrate as NO ₃ :	3.0 +/- 0.8 %
Fluoride as F:	0.7 +/- 0.4 %

3.3 TITRATION

10 ml of the solution are filled up to 1000 ml with distilled water. 10 ml of this solution need 5.1 +/- 0.8 ml 0.1 n Sodium-hydroxide (NaOH) (Phenolphthalein Indicator).

3.4 PH-VALUE 1 % SOLUTION BY WEIGHT AT 20 °C 2.8 +/- 1.0

3.5 DENSITY, g/cm³ 1.35 +/- 0.05
(FLTM EU-BI 2-2)

Date	Action	Revisions
2002 08 20	Revised	Updated and renumbered
1987 09 01	B/036762 TP	Revised 3.4, 3.5
1987 06 15	SM/EQ 6002 TP	Released C.Herriott

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4. GENERAL INFORMATION

The information given below is provided for clarification and assistance in meeting the requirements of this specification.

4.1 The phosphate system released by this specification shall be supported by the following materials:

4.1.1	Phosphate Solution, Zinc, Alkaline Cleaner	ESK-M5B355-A
4.1.2	Phosphate Solution, Zinc, Start Up	ESK-M5B351-A
4.1.3	Phosphate Solution, Zinc, Accelerator	ESK-M5B354-A
4.1.4	Phosphate Solution, Zinc, Accelerator	ESK-M5B353-A
4.1.5	Phosphate Solution, Zinc, Passivating Solution	SKM-5B9580-A