

ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

PHOSPHATE SOLUTION, ZINC START UP

ESK-M5B368-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 dip or spray phosphate equipments. This material is used in combination with ESK-M5B369-A Phosphate Solution, Zinc, Make Up, ESK-M5B370-A Phosphate Solution, Zinc, Activator, S-M5B4514-A Phosphate Solution, Zinc, Accelerator.

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	3.60 +/- 0.5 %
Nickel as Ni	0.60 +/- 0.1 %
Phosphate as P ₂ O ₅	27.20 +/- 2.0 %
Nitrate as NO ₃	1.20 +/- 0.4 %
Free Fluoride as F	0.27 +/- 0.1 %

3.3 TITRATION

6.05 +/- 0.5 mL

Titrate 10 mL of a 1 % solution by weight with 0.1 n sodium hydroxide (NaOH). Use phenolphthalein indicator.

3.4 pH VALUE 1 % SOLUTION BY VOLUME AT 20 °C

2.3 +/- 1.0

3.5 DENSITY

(FLTM EU-BI 2-2)

1.40 +/- 0.05 kg/L

Date	Action	Revisions
2002 08 27	Revised	Updated and renumbered
1987 12 18	SM/EQ1579 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 consists of the following materials:

4.1.1	Phosphate Solution, Zinc, Activator	or	ESK-M5B373-A SK-M5B9613-A
4.1.2	Phosphate Solution, Zinc, Precleaner		ESK-M5B374-A
4.1.3	Phosphate Solution, Zinc, Alkaline Cleaner	or	ESK-M5B375-A ESK-M5B372-A
4.1.4	Phosphate Solution, Zinc, Cleaner Additive		ESK-M5B358-A
4.1.5	Phosphate Solution, Zinc, Make Up		ESK-M5B369-A
4.1.6	Phosphate Solution, Zinc, Activator		ESK-M5B370-A
4.1.7	Phosphate Solution, Zinc, Accelerator		SM-5B4514-A
4.1.8	Phosphate Solution, Zinc, Passivating Solution	or	SK-M5B9580-A S-M5B4518-A
4.1.9	Phosphate Solution, Zinc, pH Correction		SK-M5B9580-B
4.1.10	Phosphate Solution, Zinc, Neutralizer		S-M5B4513-A
4.1.11	Phosphate Solution, Zinc, Sludge Conditioner		ESK-M5B335-A