

ENGINEERING MATERIAL SPECIFICATION

Material Name

Specification Number

PHOSPHATE SOLUTION, ZINC, ALKALINE CLEANER

ESK-M5B390-A

1. SCOPE

The material defined by this specification is an alkaline cleaner. It consists of biodegradable compounds in aqueous solution.

2. APPLICATION

This specification was released originally for material used as a metal cleaner in spray phosphate coating equipments.

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

Phosphate as P_2O_5	19.5 +/- 2.0 %
Carbonate as CO_3	23.5 +/- 2.0 %
Total Alkalinity as Na_2O	38.0 +/- 2.0 %
Silicate as SiO_2	2.8 +/- 0.5 %
Titanium as TiO_2	0.06 +/- 0.015 %

3.3 TITRATION

9.5 +/- 1.0 mL

Titrate 10 mL of the 1 % by volume solution with 0.1 n sulfuric acid (H_2SO_4). Use bromocresol green indicator.

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

10.1 +/- 1.0

3.5 SURFACE TENSION

33 +/- 5 mN/m

Date	Action	Revisions
2002 08 28	Revised	Updated and renumbered
1991 03 01	EP00E1089482000	Released C. Dittebrandt

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4. GENERAL INFORMATION

The information 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, Make Up	ESK-M5B338-A
4.1.2	Phosphate Solution, Zinc, Start Up	ESK-M5B337-A
4.1.3	Phosphate Solution, Zinc, Accelerator	S-M5B4509-A
4.1.4	Phosphate Solution, Zinc, Passivating Solution	SK-M5B9574-A or ESK-M5B326-A
4.1.5	Phosphate Solution, Zinc, pH-Correction Agent	SK-M5B9574-B
4.1.6	Phosphate Solution, Zinc, Activating Agent	ESK-M5B327-A