

TECHNICAL DATA SHEET

PHOS-PREP® PP 932 ACID ETCH / DEGREASER FOR ALUMINIUM

DESCRIPTION

The PHOS-PREP® PP932 sulphuric acid based cleaner/etch has been specially formulated to remove scales and tarnish from aluminium to produce a chemically clean surface, especially magnesium oxides that can interfere with the subsequent PHOS-PREP® PP 910 / PP 920 / PP971 T preparation processes.

Although PHOS-PREP® PP932 contains an inbuilt surfactant system, it may be advisable to clean heavily oiled work in PP934 (an alkali immersion cleaner), followed by a rinse, prior to PHOS-PREP® PP932 acid etching. Alternatively, additions of PHOS-PREP® PP975 & PHOS-PREP976 surfactant additives may be added to the PHOS-PREP® PP932 working bath.

The etch rate from the PHOS-PREP® PP932 treatment can be varied by adjustments to the immersion time, the bath temperature and bath concentrations.

Etch Rates Achieved

PHOS-PREP® PP 932 at 10% solution operating at 20 C for 10 minutes will achieve an etch rate of 1g m², increasing the operating temperature by 10 C will result in a doubling of the etch rate, therefore typical spray processes have contact time of 3 minutes will require a temperature of >50 C to obtain 1g m².

PLANT AND EQUIPMENT

Acid resistant materials such as polypropylene, UPVC or polyethylene, 316 stainless, are preferred.

OPERATION

The PHOS-PREP® PP932 bath is normally operated at ambient temperature, at a concentration of 2% to 10% v/v with a process time of 2 to 10 minutes.

For faster process times, or a deeper etched finish, the bath can be operated at stronger concentrations, elevated temperatures or longer process times.

The optimum bath strength should be maintained to produce consistent results. Additions to the bath can be made on the basis of an assessment of the finish of standard of work, or by analysis of bath concentrations.

Following treatment in the PHOS-PREP® PP932 bath, the work should be adequately rinsed prior to further processing.

LABORATORY CONTROL

To a 20 ml bath sample add approximately 50 mls de-ionised water and 20 mls of 20% KF solution.
Add 5 drops of the Phenolphthalein indicator

Titrate the sample against 1M sodium hydroxide solution using phenolphthalein indicator to a pink end point.

$$\text{TITRE} = \% \text{ VOL} / \text{VOL PHOS-PREP}^{\circ} \text{ PP932}$$

EXAMPLE: PHOS-PREP® PP 932 IS USED AT 5% SOLUTION THE TITRATE FIGURE WILL BE 5

int. $\text{TITRE} = \% \text{ VOL} / \text{VOL PHOS-PREP}^{\circ} \text{ PP932}$

Product Safety Data Sheet – A safety data sheet is available

PHOS-PREP® PP932 is part of Pre-Treatments Ltd range of products for the treatments of iron, steel & aluminium and aluminium alloys at low temperatures.

Pre – Treatment Solutions Ltd continues to improve the quality and performance of the PHOS-PREP® range of products and reserves the right to modify product formulations without prior notice

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