

TECHNICAL DATA SHEET

PHOS-PREP® PP933 ALUMINIUM ALKALINE ETCH CLEANER

GENERAL

PHOS-PREP® PP933 Alkaline Etch Cleaner is formulated for the spray or immersion pre-treatment of aluminium on powder coating plants. The system is designed to produce a chemically clean aluminium surface to give uniformity of reaction during subsequent processing, the PHOS-PREP® PP 933 may be used as a replacement for potassium dichromate applications where structural adhesive qualities are required under ISO 17212 (we recommend testing for compliance before introducing to the production department)

OPERATION

PHOS-PREP® PP933 Alkaline Etch Cleaner is a powder, and a new bath is made up by its addition to warm water to make a bath concentration of between 10 grams/litre and 40 grams/litre, depending on the cleaning and etch rate required.

The solution should be operated at temperatures between 45°C and 70°C. Typical immersion times are 3 to 8 minutes, depending on the amount of etching required.

PHOS-PREP® PP933 Alkaline Etch Cleaner is designed for plants that have little or no fume extraction.

PLANT

The process tank and pipe-work may be constructed from mild steel and light metal fittings must be avoided.

LABORATORY CONTROL

Transfer a 25 ml sample of the etch bath into a titration flask and add 50 ml clean water and bromothymol blue/phenol red indicator. Titrate against normal hydrochloric acid until the colour changes from blue to yellow.

$$\text{Bath Concentration (grams/litre)} = \text{ml M HCl} \times 6$$

To replenish, add 1kg of PHOS-PREP® PP933 per 1000 litres of bath for each gram/litre that the concentration is lower than required control point, between 1.6 and 6.4.

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