

Revised May 2017

## **TECHNICAL DATA SHEET PHOS-PREP® PP941 – CLEAR CHROME SOLUTION**

### **1. GENERAL**

PHOS-PREP® PP 941 is a bleached chromate system for the pre-treatment of aluminium and zinc surfaces. It confers the advantages of the protection of yellow chromate systems, but without risk of discolouration showing through any subsequently applied paint.

### **2. SPECIFICATION**

PHOS-PREP® PP941 is a single pack system, with PHOS-PREP® PP 941 providing the initial make up chemical.

The makeup of a new PHOS-PREP® PP 941 bath will be dependent on the process time required and take into account the effluent system. However, a new bath would typically be made up at 4/6% vol/vol PHOS-PREP® PP941 – fill tank with water adjust the pH with 50% Nitric to lower the pH to 4.5 / 5 pH (to condition the water then add between 4/6% by volume the PHOS-PREP® PP 941) mix working solution and take pH reading adjust if required to 2.3 / 2.6 with 50% Nitric Acid

### **3. PROCESSING CONDITIONS**

The processing conditions may vary depending on the type of plant, but the process would normally run at a pH between 2 and 3, a temperature between 10 and 25°C, with a time of 1 to 3 minutes. For spray systems, spray pressures between 5 and 20 psi are recommended.

### **4. LABORATORY CONTROL**

The PHOS-PREP® PP941 bath should be tested on a regular basis to ensure that the chemical balance is maintained and that a consistent performance is obtained.

Measure a 50 ml sample of the bath into a titration flask.

Add approximately 10 ml of 10% vol/vol sulphuric acid (or 2ml 50% sulphuric acid) and 40 ml of clean water.

Add 0.2 grams potassium iodide and mix. Then add a little iodine indicator (starch solution or alternative).

Titrate with 0.1N (0.1M) sodium thiosulphate solution to a clear end point.

Bath concentration = Titre x 0.6% v/v