PB SEAL SN
RUST STAIN INHIBITOR

INTRODUCTION

A liquid chemical that is added to a final rinse after cleaning, derusting or iron phosphating, to inhibit rust staining during slow drying-off. It evaporates at approximately the same rate as water and leaves virtually no residue, allowing the parts to be further processed or over-painted.

BENEFITS

- Helps maintain quality - inhibits rust staining.
- Chromium-free - reduced effluent problems.
- Compatible with a wide range of treatments.
- Concentrated product - very economical.
- Environmentally friendly - no V.O.C. emissions.

COVERAGE

The rate of consumption will depend greatly on bath losses through drag-out and overspray, and the frequency of bath discard. As a guide the following range has proved reliable:

Dip or Spray: 200 – 400 m2/kilo PB Seal SN.

APPLICATION

Normally, the process sequence is:

1. Degrease, de-rust or phosphate.
2. Clean mains water rinse.
3. Rinse with PB Seal SN. 4. Dry-off (see DRYING below).

NOTES:

(i) The bath of PB Seal SN may be heated up to 40°C to enable quicker drying of the components.

(ii) PB Seal SN contains nitrite and should not, therefore, be added to any solution containing amines, as there is the possibility of forming toxic nitrosamines.

BATH MAKE-UP

By Dip or Spray, for every 1000 litres of bath:

1. Nearly fill the bath with water (see NOTE below).
2. Add 10 litres of PB Seal SN and stir thoroughly or circulate by spray and top up the bath to the working level.
3. Measure the Rinse Titration (see BATH CONTROL below) and adjust accordingly with additional PB Seal SN if below the stated range. Note initial volume used for future bath make up.

NOTE: Mains water of 200 ppm total dissolved solids, or higher, will be increasingly unsuitable for a final rinse, particularly if heated. Increasing dissolved solids leads to a decrease in performance. If this is the case, regular discards or deionised water should be considered.

Dip or Spray

Rinse Titration cm^3	4 – 6
Temperature °C	Ambient
Time mins	0.5 – 1

CONTROL POINTS

Temp	20- 50˚C
Time	1 – 5 mins
Pressure	1 – 2 bar (15-30 psi)

BATH CONTROL/REPLENISHMENT

The bath should be renewed regularly (see **BATH MAKE UP NOTE** above) and kept at its operating level with clean water.

Rinse Titration: Measure 10 cm3 of the bath into a flask, add 5ml Sulphuric acid and titrate with 0.1N Potassium Permanganate until the pink colour persists for a minimum of 15 seconds.

Replenishment: Add 2.0 litres PB Seal SN per 1000 litres of bath for every cm3 below the operating level. In areas where the quality of water commended is not available, higher replenishment rates may be required.

EQUIPMENT

The PB Seal SN stage is usually constructed of mild steel, but for maximum plant life stainless steel may be used. Pipework and jets may be of mild steel, stainless steel, or plastic. Guidance on suppliers of processing equipment may be obtained from our Sales Office.

DRYING

An indirect-fired oven operating at 100°C – 125°C and designed for the purpose with rapid air movement is commended. The operating temperature of the PB Seal SN bath and the jigging of the work should be such that the oven dries the work in the time available.

ENVIRONMENTAL CONSIDERATIONS

PB Seal SN contains no VOCs or chromium compounds.
Baths should not be discarded into mains drainage. A Licensed waste contractor must be used for disposal.

HEALTH AND SAFETY CONSIDERATIONS

PB Seal SN is alkaline. Before use, refer to the Material Safety Data Sheet.

PRODUCT FAMILIES

The following products are referred to in this data sheet.

PRODUCT NAME	PRODUCT NUMBER
PB SEAL SN	**MP0243**

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