

## TECHNICAL DATA SHEET

### PHOS-PREP® PP 972 LT Low Temperature PHOS-PREP® 979 LT & 976 ADDITIVE FOR ALUMINIUM, STEEL, GALVANISED STEEL AND CAST IRON

<b>USE:</b>	Multi metal	Dilution:	0.5% PP 972 LT & 0.5% PP 979 LT FOR SPRAY	
	Multi metal	Dilution:	1% PP 972 LT & 1% PP 976 FOR IMMERSION	
		Time:	2-4 minutes	Temperature: 30 - 60°C
	Aluminium	Dilution:	1% PP 972 LT & 1% PP 979 LT FOR SPRAY	
	Aluminium	Dilution:	2% PP 972 LT & 1% PP 976 FOR IMMERSION	
		Time:	2-4 minutes	Temperature: <30 - 60°C

## APPLICATION

**PHOS-PREP® PP 972 LT** is a low temperature <30°C, complete chrome free conversion coating for use on aluminium extrusions, aluminium and white metal engineered parts, aluminium coil, steel and zintec to greatly enhance corrosion protection and adhesion of subsequently applied coatings. This ensures the absolute minimum removal of aluminium from the metal surface during the conversion coating, which gives low levels of sludge and long bath life. PHOS-PREP® PP 972 LT is a fully built product which cleans and conversion coats in a single stage, greatly reducing process times and cost. Product concentrations are easily controlled by simple titration or by conductivity or pH. The resulting conversion coats are resistant to high temperature accelerated adhesion test – heating in water to 125°C for 2 hours giving no loss of topcoat adhesion. \*\*

\*\* Pressure cooker test EN12206-1 part 5,10 to pass this test using PHOS-PREP® PP PP972 LT aluminium extrusions may require pre etching with PP 933 (alkaline etch) or PP932 (acidic etch) cleaning to remove oxides from the surface that may be present from the aluminium extrusion process that will interfere with top coat adhesion

For external architectural applications extrusions will require abrading, and pre painting with an etch primer.

PHOS-PREP® PP 972 LT is suitable for soak or spray application

**PHOS-PREP® PP 979 LT & PHOS-PREP® PP 976** detergent additives are a sophisticated blend of surfactants specifically formulated for use with spray & immersion pre-treatment processes to improve the degreasing capability.

PHOS-PREP® PP 979 LT & PP 976 may be used with lightweight iron and zinc phosphates as well as alkaline and acidic cleaners.

## EQUIPMENT

The recommended material of construction for tanks and pipe-work is 316 stainless steel, although some plastics or rubber may be suitable, provided there is no mechanical damage.

## HANDLING AND PERSONNEL SAFETY

Normal precautions for handling chemicals should be observed, PHOS-PREP® PP 972 LT causes burns to eyes and skin. In case of contact with skin wash thoroughly with plenty of water. In case of contact with eyes irrigate with copious amounts of clean water and seek medical attention immediately.

Small spills may be washed to waste with plenty of water. Larger spills should be contained and neutralised with soda ash or builders lime to a pH between 6 and 9, before washing to waste or sweeping up for disposal. Used solutions will normally contain complexed aluminium and will require neutralising before disposal.

## PROCESS CONTROL

### BATH CONTROL:

Take a 75ml sample and transfer to a plastic beaker  
Add 5 drops of phenolphthalein solution will go cloudy  
Titrate with 0.1 N sodium hydroxide until sample turns pink

For each 1ml of 0.1 N sodium hydroxide used that indicates the actual % of the bath solution

Example:

5 mls of sodium hydroxide used = 0.5%

7 mls of sodium hydroxide used = 0.7%

10 mls of sodium hydroxide used = 1.0%

15 mls of sodium hydroxide used = 1.5%

**Product Safety Data Sheet** – A safety data sheet is available

PHOS-PREP® PP 979 LT 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