

# PRE-TREATMENT SOLUTIONS LTD

## Product Data Sheet

Product	PHOS-PREP PP60S
Reference Number	PP 60 S
Issue Number	3
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### 1. USES OF THE PRODUCT

**Phos-Prep PP60S** is an organic based paint stripper for removal of **polyester** paint finishes from ferrous metal surfaces by immersion. (it will also remove some epoxy-polyester paints with low epoxy contents). At lower temperatures it may also be used on aluminium and zinc substrates, however slight attack may occur with prolonged times and/or high temperatures.

### 2 BENEFITS IN USE

Low temperature operating range – saves energy – lower fuel bills.  
 Low evaporation losses – no toxic fumes – less chemical replacement  
 Solids easily removed – long life – lower costs and maintenance

### 3 TYPICAL SEQUENCE OF OPERATIONS

Stage No	Process Description	Strength (concentration)	Process Time (mins)	Temperature (oC)
1	Phos-Prep PP60 S	7 – 20 points	5 – 30	20 – 50
2	Water Rinse (spray optional)	<1.5 points (50 ml sample)	1 – 2	Ambient
3	Phos-Prep PP973 (optional)	See data sheet	-	-

After rinsing, all pockets of water should be removed by air blow or vacuum.

### 4 OPERATING THE PROCESS

#### 4.1. Chemicals Required

Product Name	Description
Phos-Prep PP60S	Organic Solvent Paint Removal chemical
Phos-Prep PP60A Additive	Additive to maintain alkalinity
Phenolphthalein Indicator Solution	For Alkalinity determination
0.1N Hydrochloric Acid	For Alkalinity determination

For the control of the process, testing equipment will be required.

#### 4.2. Make-Up

To make up the solution carry out the following instructions:  
 Clean the tanks and purge if necessary and flush out with clean water and dry thoroughly.  
 Determine the working volume of the tank or refer to the relevant Plant Information and Control Summary Sheet.  
 Fill the tank to the operating level with:

Product Name	Quantity
Phos-Prep PP60 S	(depends on tank capacity)

Test in accordance with **Section 4.3** and make any final adjustments.

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### 4.3. Testing and Control

#### Concentration (pointage)

Using a syringe take a 5 ml representative sample of the bath solution (take care to avoid air bubbles or solid contaminants) and transfer it to a clean 250 ml beaker.  
Add approximately 100 ml of clean cold water and swirl gently to mix.  
Add 5 to 10 drops of Phenolphthalein Indicator and titrate with 0.1 N Hydrochloric Acid Testing Solution until the colour changes from pink to colourless.  
The reading on the burette represents the alkalinity (pointage) of the bath. For a new solution this will be about 15 points  
For every point below the recommended figure add the following, per 1000 litres bath solution:

Product Name	Quantity
Phos-Prep PP60A Additive	1.3 kgs

The working bath should be tested regularly. Small, frequent additions are recommended for consistent results rather than just one occasional large addition. The additions of **Phos-Prep PP60 A Additive** should be made and the bath mixed.

## 5 LOADING & WORK HANDLING

Load the jigs or workbaskets in such a manner as to ensure complete coverage, minimum trappage, intercomponent masking, good drainage and to prevent floatation.  
Occasional work agitation, especially in the rinse stage will improve process efficiency.

## 6 STORAGE AND HANDLING

Store in a cool place away from foodstuff and incompatible materials. Facilities should be such that spillages or leakages can be contained. Store in the original sealed containers.  
To optimise the transfer of chemicals to the plant the use of transfer pumps and chemical metering pumps is recommended.  
Do not use the following materials for dispensing chemicals: galvanised steel, aluminium or non-ferrous metals.  
**Phos-Prep PP60 S** is harmful and contact with the skin, eyes or clothing must be avoided. Protective clothing, including goggles or face shield, should be worn when handling the material.  
**Phos-Prep PP60 A Additive** is very corrosive and sensitive to air and moisture. Keep containers tightly sealed at all times. Contact with the skin, eyes and clothing must be avoided. Gloves, eye protection, dust mask and overalls should be worn when handling the solid material.

## 7 EQUIPMENT

Tanks and heating equipment may be fabricated from 6mm thick mild steel, double welded inside and out, although for maximum service life, grade 316 S16 stainless steel is to be preferred. Small tanks (up to 500 litres) can be constructed from suitable plastics. The tank must not be heated directly; all heating must be indirect, either using a water jacket or hot water, steam or hot oil coils or radiators.  
Non-ferrous metals must not be used for equipment that will come into contact with the solution.  
Extraction is required for heated solutions. Lip extraction is not effective, as it will not cover the working envelope.  
There should be adequate clearance between heaters and the bottom of the tank to allow sludge to collect undisturbed.

## 8 MAINTENANCE

Once established the operating parameters of the process should be maintained to within +/- 5% of the optimum values.

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During the operation of the process, the residues of the paint that is removed from the metal surface collects on the bottom of the tank. These residues must be removed regularly as their continued presence will prevent efficient paint removal. The following method is suggested:

1. Allow the tank to settle overnight and switch off any heating.
2. Pump out the solution into suitable containers.
3. Remove the solid sludge from the bottom and sides of the tank and dispose of via a licensed waste carrier.
4. Pump back the solution and top up to the working level with fresh chemical.

For large installations a filter press and pump can be used to continually remove the paint residues.

Thermostat controls and temperature indicators should be regularly serviced and calibrated to ensure their correct operation.

### 9 HEALTH AND SAFETY

The process evolves no hazardous fumes and is essentially non-hazardous in use when used as directed. Contact with the working solution should be avoided. If contact with the eyes occurs, irrigate with copious quantities of clean water and seek medical attention, if discomfort persists. Avoid breathing the vapours. Eyewash facilities should be available near the plant in case of accident.

A good standard of industrial hygiene should be observed when handling chemicals or operating the process. Do not smoke or eat when handling chemicals and ensure that protective equipment is replaced, maintained or regularly laundered as recommended.

Further information, including First Aid details, as required by COSHH Regulations will be found in the relevant Material Safety Data Sheet.

### 10 ADVISORY SERVICE

Further information and recommendations, including Plant Advisory Service are available.

Technical training programmes are held for the training of pretreatment personnel and managers.

**PLEASE NOTE THAT THE INFORMATION CONTAINED IN THIS PRODUCT INFORMATION SHEET IS ONLY A GENERAL GUIDE TO OPERATE THE PROCESS. TECHNICAL SERVICES WILL RECOMMEND THE OPERATING PARAMETER SUITABLE FOR SPECIFIC PLANT.**

**EVERY ENDEAVOUR HAS BEEN MADE TO ENSURE THAT THE INFORMATION IN THIS DOCUMENT IS RELIABLE, BUT WE DO NOT ACCEPT ANY LIABILITY FOR ANY LOSS, INJURY OR DAMAGE WHICH MAY RESULT FROM ITS USE.**