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### TECHNICAL DATA SHEET

## PHOS-PREP® PP90S AWS ACTIVATED WHEEL PAINT STRIPPER

#### INTRODUCTION

PHOS-PREP® PP 90S AWS is an organic Methylene Chloride free paint stripper for the removal of polyester paint finishes from ferrous and non ferrous metal substrates. (PHOS-PREP® PP 90S AWS will remove a variety of epoxy – polyester paints with epoxy contents), that have typically been used in the manufacture of alloy wheels.

PHOS-PREP® PP 90S AWS is safe to use on multi metal applications however we do recommend testing on site to ensure no surface damage occurs to sensitive substrates, as severe attack on aluminium parts will take place.

PHOS-PREP® PP 90S AWS can be used at temperatures from ambient to 60°C.

PHOS-PREP® PP 90S AWS is based on a high boiling point solvent (b.p 200°C) hence low volatility when used at 60°C, blended with alkaline and aqueous accelerators and is very effective for the removal of polyester paint finishes, despite being alkaline / aqueous based the formulation is activated therefore severe attack of aluminium substrates will take place

## **EQUIPMENT**

The recommended material of construction for tanks and pipe-work is 316 stainless or mild steel, some plastics or rubber may be suitable, with mechanical pump agitation / filtration to extend product life, to remove particulate debris.

#### **PROCESS**

Appropriate chemical treatment ahead of PHOS-PREP® PP 90S AWS depends on the condition of the components to be processed, removal of any heavy oil deposits should be removed if present.

PHOS-PREP® PP 90S AWS will remove paint within 30+ minutes when used as recommended (dependant on coating thickness) breaks down the paint to very fine particles rather than sheets, which assist intricate components being treated, although times for varying paints will vary.

Place parts in the PHOS-PREP® PP 90S AWS bath by jigs or work baskets, after the required dwell time remove, rinse the parts with water, seal mild steel parts with PHOS-PREP® PP 973 to prevent rapid oxidation, dry the parts.



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# For removing the powder paint from alloy wheels we recommend the following process

#1 PRE CLEAN with PHOS-PREP® PP 931 @ at 2% in water to remove road dirt and brake pad contamination

#2 STRIP with PHOS-PREP® PP 90S AWS – used as supplied at a minimum temperature of 55°C – strip time will vary from various OEM wheel manufacture, typically times between 2 to 4 hours will be required, in some cases total paint removal will not take place however the paint/primer will soften sufficiently to allow the paint to be removed by pressure washing, or wet blasting with a very fine grade of aluminium oxide and water to remove the remaining debris.

#3 Rinse Wheels and continue with preparation and repair of wheels before repainting

## Examples of alloy wheels before and during process

**Before Stripping** 



**After- One Hour** 



After - Two & half Hours



### PROCESS CONTROL

#### **MAKE UP**

PHOS-PREP® PP 90S AWS: is used as supplied, clean out existing tank purge with water, dry thoroughly; determine the volume of the tank. Add PHOS-PREP® PP 90S AWS as supplied, for every 400 ltrs of PHOS-PREP® PP 90S AWS add 1 x 25 ltr of PHOS-PREP® PP 90 STARTER - PHOS-PREP® PP 90 STARTER accelerates the chemical reaction to allow the stripping effect to take place, in some cases filtration and agitation at operating temperature of 55°C for 48 hours may be required before use to ensure the PHOS-PREP® PP 90S AWS will be effective as described above.

We recommend continuous filtration of the PHOS-PREP® PP 90S AWS with suitable bag filters of between 100 to 50 micron mesh size housed in a filter housing to allow easy removal to allow the debris to dry out and be removed and disposed of.

#### REPLENISHMENT



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PHOS-PREP® PP 90A is used to replace consumed accelerator to the PHOS-PREP® PP 90S AWS bath, when adding the PHOS-PREP® PP 90A titrate the solution and add the PHOS-PREP® PP 90A until the required pointage is achieved we recommend for effective stripping a value of between 60 to 80 points be obtained.

Every 3 to 6 months to maintain the balance of the PHOS-PREP® PP 90S AWS bath solution we suggest that decanting the solution into an IBC, leaving approx 2% of the bath solution in the tank, clean out tank pressure wash retained paint particles, purge with water, rinse thoroughly drain and refill with decanted solution, to bring tank to correct working level top up with concentrate PHOS-PREP® PP 90S AWS solution.

PHOS-PREP® PP 90S AWS contains other active ingredients that will be consumed during use, in practice as the bath levels lowered due to natural production losses, we recommend that PHOS-PREP® PP 90A, be added weekly, to ensure a correct balanced solution we ask for a sample to be sent for evaluation every 6 month.

### LABORATORY TESTING

During use the alkaline accelerator will be consumed requiring an addition of PHOS-PREP® PP 90A to return the bath to the correct strength, the concentration is measured as follows:

#### **FREE ACID POINTAGE**

The bath is controlled by testing the acidity.

Take a 2ml sample of the bath (filtered) add 25mls of deionised water allow to mix well add 15 drops of Bromocreosol Green indicator, contents will turn Blue / Green , titrate with 0.1 N sulphuric acid until the changes from blue/green to yellow.

A pointage of between 60 to 80 should be obtained for a new solution, when used the pointage will reduce if the paint is not being removed effectively add the PHOS-PREP® PP 90A until a pointage of 60 is reached.

The working bath should be tested regularly, small frequent additions of PHOS-PREP® PP 90A are recommended for consistent results.

## Control of PHOS-PREP® PP 90S AWS Solvent Content

Specific Gravity for the solvent content / wetting agent is carried out this should be maintained at 1.055 by checking with a Hydrometer, to raise the Specific Gravity add 15% of PHOS-PREP® PP 90S AWS for each 0.005 short of 1.055

#### **DISCLAIMER**

THE APPLICATION INFORMATION IN THIS DOCUMENT IS FOR INFORMATION AND GUIDANCE PURPOSE ONLY

PLEASE BE AWARE THE EFFECT OF PAINT STRIPPERS CAN VARY DRASTICALLY AND ONSITE TESTING SHOULD BE CARRIED OUT TO EVALUATE THE OPERATING PROCEDURE TO ENSURE NO DAMAGE TO PARTS TREATED WITH PHOS-PREP® PP 90S / PHOS-PREP® PP 90A – NO LIABILITY WILL BE ACCEPTED FOR USE OF THE PHOS-PREP® PP 90S AWS / PP90A - FULL RESPONSIBILITY FOR OPERTING PROCEDURE LIES WITH THE USER.

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