# PROTECTALL 210

**ORGANO-MINERAL TOPCOAT**

## INTRODUCTION

Protectall 210 has been developed to enhance the anti-corrosion properties of trivalent chromium passivates on zinc and zinc alloys for the automotive and other industries. It contains organic polymers and polysilicates.

Protectall 210 is designed to protect passivated zinc and zinc alloys against corrosion in a variety of environments, including the hostile conditions found in engine compartments and on the exterior of motor vehicles. It gives a controlled torque tension of 0.15 +/-0.03

## BENEFITS

- High corrosion protection and stability versus temperature (over 120°C during several hours).
- Corrosion resistance of greater than 200 hours to white and 750 to red rust can be achieved depending on passivate and plated alloy.
- High adherence on zinc electroplated parts
- High ductility
- Improves self-healing properties of trivalent chromium passivates.
- Can be applied on clear and black passivates by barrel application.

## SOLUTION MAKE -UP

Protectall 210 75 – 85% v/v with water

## OPERATING DATA

| | |
|---|---|
| **Concentration** | 75 - 85% |
| **SG** | 1.040 – 1.045 |
| **Temperature** | 20 - 30°C |
| **pH** | 8.8 – 9.2 |
| **Time** | 20 – 60 secs |
| **Agitation** | Barrel rotation |

## EQUIPMENT

| | |
|---|---|
| **Tanks** | Polypropylene or PVC lined tanks. |
| **Heaters** | PTFE heaters with thermostatic control. |
| **Filtration** | Continuous filtration through 80 - 150µm filter cartridges. |

## INSTALLATION

It is essential that the tanks to be used for Protectall 210 are thoroughly cleaned and leached before any product is introduced.

If in any doubt as to the cleaning procedure contact PMD Technical Department.

1. Add the required volume of Protectall 210 to the tank.
2. Add water to volume with stirring.

## PROCESS SEQUENCE

1. Passivate
2. Rinse
3. Rinse
4. Drain to remove excess water
5. Protectall 210
6. Drain
7. Warm spin dry

## MAINTENANCE AND CONTROL

The solution should be analysed regularly and replenished as necessary. (See analysis method).

Concentration loses are corrected by the addition of Protectall 210. This will also maintain the pH.
If pH requires adjustment add ammonia solution to raise.

## ANALYSIS METHOD

### Method

1. Weigh an aluminium dish and record weight as A g.
2. Pipette 10.0mls of the bath into the dish.
3. Place the dish into an oven at 120°C and dry to constant weight.
4. Allow to cool in a desiccator and weigh. Record weight as B g.

### Calculation

% Protectall 210 = (B-A) x 48

### Replenishment

For every 1% required add 10ml/L Protectall 210

## DISPOSAL

Dispose of in accordance with local authority requirements.

## PRODUCT FAMILIES

The following products are referred to in this data sheet.

| **PRODUCT NAME** | PRODUCT NUMBER |
|---|---|
| **Protectall 210** | 241006 |

Whilst every endeavour has been made to ensure that the information given in this data sheet is correct, PMD Chemicals Limited gives no warranty, express or implied, relating to the use or performance of this product.