

PHOSCOAT B LA1084

Suitable for phosphating mixed metals

PHOSCOAT B LA1084 is a one component liquid phosphating chemical. It will clean and phosphate mixed metals in the one operation.

PHOSCOAT B LA1084 is used for both bath make up and replenishment. This coating improves the adhesion of paint and reduces corrosion. It is used by spraying or dipping.

PHOSCOAT B LA1084 is recommended for:

- Light cleaning and light phosphate coatings on iron, steel, stainless steel, galvanised metal, zincalume and aluminium in the one operation.
- General purpose phosphate coatings. It is not suitable for high quality paint as is required on automotive body panels.
- Because of the low film thickness of the phosphate coating, the phosphate bath needs less maintenance than a high film build zinc phosphate bath.
- It gives a suitable coating for a subsequent chromate seal.

PHOSCOAT B LA1084 HAS BEEN DESIGNED:

1. To impart medium corrosion and humidity resistance to metals. Performance is further improved by using a chromate seal in the final rinse.
2. To impart excellent paint adhesion to the metal in subsequent painting operations.
3. To maintain its high performance characteristics with only low maintenance to the phosphating bath.

CHEMICAL AND PHYSICAL PROPERTIES

| | |
|-------------------|--------------------|
| Appearance: | Clear, thin liquid |
| Flash Point: | Non-flammable |
| Specific gravity: | 1.1 |
| pH (1% solution): | 4 -6 |
| Odour: | Low odour |

DIRECTIONS OF USE

PHOSCOAT B LA1084 is used by immersion or spray application.

Spray Application:

3 Stage Line

- 1) The metal must be moderately clean prior to phosphating. Remove heavy rust manually. Remove heavy soil by solvent cleaning or by hot tank degreasing followed by thorough rinsing.
- 2) Cleaning and Phosphating: Use about 40 lt of **PHOSCOAT B LA1084** per 1000 litres of bath solution. Heat the bath to 35 - 50°C. Circulate for at least 10 minutes to ensure good mixing. Spray for 1 - 3 minutes at a pH of 4 - 6. Contaminants like oil and grease will accumulate on the bath surface over time and should be removed by flooding to the tank overflow.
- 3) Rinse thoroughly with cold water. using an overflowing rinse. Spray for 30 - 60 seconds at room temperature.
- 4) After rinse thoroughly with chrome coating additive. Spray for 30 - 60 seconds at 30 - 55°C
- 5) Dry in an oven with hot, oil free compressed air.

4 Stage Line

- 1) As above with a precleaning spray of 10 - 30 lt of **PHOSCOAT B LA1084** per 1000 lt of water. Spray for 1 - 3 minutes at a pH of 4 - 6.

Operating Details

| Make Up | Preclean Spray | Clean and Phosphate |
|--------------------------|-----------------------------|--|
| PHOSCOAT B LA1084 | 1 - 3% by volume | 2 - 5% by volume |
| pH | 4.2 – 4.8 | 4.2 – 4.8 |
| Free Acid | Zero | Zero |
| Temperature | 60 - 80°C | 60 - 80°C |
| Time | 1 - 3 minutes | 1 - 2 minutes (spray) 3 – 5 miutes (tank) |
| Pressure | 100 - 170 kPa (15 - 25 psi) | 100 - 170 kPa (15 - 25 psi) |

Immersion Process:

- 1) The metal must be fairly clean prior to phosphating. Remove heavy rust and heavy soils prior to phosphating.
- 2) Phosphating: A one stage phosphating treatment is normally used.
- 3) Rinse thoroughly with cold water using an overflowing rinse.
- 4) Optionally a chromate sealing rinse may be used. This may be used hot to assist in drying.
- 5) Dry and paint.

Control Procedure.

Phosphating Bath: Total Acid

Titrate a 10 ml sample with 0.1N Sodium Hydroxide to the phenolphthalein end point. The number of ml is the pointage.

Bath concentration = acid points * 0.7 = %

Maintain the pointage by adding **PHOSCOAT B LA1084**. An addition of 5 lt of **PHOSCOAT B LA1084** to 1000 lt of bath will increase the pointage by 1.

Free Acid: Free acid is zero. The pH is 4.2 – 4.8

Rinse Bath The pH should be 4 – 5

After Treatment

Parts should be painted immediately after cooling.

Equipment

Tanks, spray tunnels, heating elements, pipework, spray tubes and spray nozzles may be constructed from mild steel, stainless steel or plastic.

DISPOSAL

Dispose according to federal, state and local regulation.