

# Technical Data Sheet

## Black Passivation EB-403

Black Passivation EB-403 is an ambient temperature immersion process for producing shiny jet black conversion coating on Alkaline zinc, acid zinc and cyanide zinc plated surfaces. Black passivation offers good corrosion resistance. Two hundred plus SST hours (white rust) can be achieved, if sealed with Sealant EB-407 and anti-rust oil.

### Make-Up Method:-

- Firstly clean tank thoroughly (PP, PVC Tank Recommended).
- Add required quantity of EB-403 Part A with gentle stir.
- Add required quantity of EB-403 Part B and stir properly.
- Maintain Operating level of tank with distilled water and mix well from 3 to 5 minutes.
- Check and adjust pH with 50% sulfuric acid to lower pH., add 50% sodium hydroxide to raise pH.

### Operating Parameters:-

- Temperature:- Ambient Temperature
- Concentration:- Part-A 80~120ml/litter (Optimum 100ml/litter)  
Part-B 80~120ml/litter (Optimum 100ml/litter)
- Residence Time:- 30-60 second`s
- pH:- 1.2~2.5

### Process:-

- Zinc Plating (10~12 micron recommended)
- Water rinse
- Water rinse
- Sulfuric Acid dip 1.0~2.0%
- Water rinse
- Black Passivation
- Water rinse
- Water rinse
- Sealant dip (60 Second)
- Hot Dry (50~60 °c)
- Dip or spray in anti -rust oil
- Air dry

### Replenishment:-

- Bath is replenished by visual observation or by analysis. Small additions of A-B parts of EB-403 A and EB-403 B are added to the bath with stirring.
- If coating is iridescent after replenishment addition of EB-403 B can be increased

### Cautions:

- Must Wear PPE's Rubber Gloves, Long shoes and apron during chemicals mixing.
- Care should be taken while adding sulfuric acid.

### Waste Treatment:

Black Passivation EB-403 solutions contains chromic acid (hexavalent). It should be neutralized with ferrous sulfate to trivalent stage and upon reduction should be neutralized with alkali before discarding into sewerage line.