

Trivalent Chromium Black Zinc Passivator TCP-975**TCP-975 三价铬黑锌钝化剂（酸性镀锌钝化剂）****一. Features**

1. TCP-975 trivalent chromium black passivator contains no hexavalent chromium, silver or other harmful metals, fully complying with environmental protection regulations.
2. This product is exclusively applied to **acid zinc plating**. It produces a uniformly deep black passivation film.
3. It is a single-component passivating solution. Combined with **PB-953** sealant after black passivation, the salt spray corrosion resistance of the coating can be significantly enhanced, withstanding over 72 hours of salt spray test without white corrosion spots.

二. Operating Parameters

Item	Optimum Value	Operating Range
TCP-975 Concentration	200ml/L	180-220ml/L
Temperature	30℃	20-40℃
pH Value	1.8	1.6-2.5
Processing Time	30s	18-35s
PB-953 Concentration	150ml/L	100-200ml/L
Temperature	40℃	25-50℃
pH Value	4.5	4.0-5.0
Processing Time	5s	3-8s

三. Bath Make-up

1. Fill the tank with half volume of water.
2. Add the required amount of TCP-975 and stir thoroughly.
3. Top up the solution to the standard working volume.
4. Test and adjust the pH value with diluted caustic soda solution under continuous stirring.
Adjust the solution temperature to the specified range.