

# Progressive Electroplating Chemicals Pvt Ltd

B - 177 Industrial Estate  
Dholewal, Ludhiana

**TEST** : Spot test procedure for Hexavalent Chromium in Trivalent passivation for zinc plated surfaces.

**PRODUCT** : Tow ball, zinc plated ( trivalent passivation).

**COMPANY** : King Industries

**CHEMICAL REQUIRED** : 1) 1.5 Diphenyl carbazide AR Grade  
2) Acetone AR Grade  
3) Ethanol (96% v/v AR Grade)  
4) Orthophosphoric acid sol.(75% m/m AR Grade)

**SOLUTION PREPARATION** : Prepare solution less than 8 hours prior to use. Dissolve 0.4 g of 1.5 Diphenyl Carbazide in a mixture of 20ml acetone and 20 ml Ethanol. After Dissolution add 20 ml of Orthophosphoric acid solution and 20 ml Distilled water.

## TEST PROCEDURE :

<u>Sample No.</u>	<u>Action</u>	<u>Reaction</u>	<u>Remarks</u>
PEC/KI/05	Put 1- 5 drops of test Solution on sample surface	No Colouration	Hexavalent chromium is not present

**NOTE** : If a red to violet colour appears within 2- 3 minutes, Hexavalent Chromium is present.

**CONFIRMATION** : The towball sample PEC/KI/05 is free of Hexavalent chromium.

**TEST PERFORMED BY** : R. Khan

**DATE OF TESTING** : July 3, 2007