

PMD (UK) LTD PROCESS DATA

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Z6BL-04/02
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PREV 1

ZINCOPASS 6 BLUE

INTRODUCTION

Zincopass 6 Blue is a single stage dip process designed to produce a clear blue chromate finish on zinc plate. The process is economical and simple to operate giving high quality results.

BENEFITS

Inhibits tarnishing

Provides good corrosion protection

Easy to control

SOLUTION MAKE-UP

Zincopass 6 Blue 1.0 -2.0% v/v with water

OPERATING DATA

Concentration	1.0 - 2.0%
pH	1.2 – 2.0
Temperature	Ambient
Immersion Time	10 - 45 seconds
Agitation	Work movement preferred
Extraction	Recommended.

EQUIPMENT

Tanks Polypropylene or polyethylene

Caution: Do not use glass or ceramic containers.

INSTALLATION

It is essential that the tanks to be used for Zincopass 6 Blue are thoroughly cleaned and leached before any product is introduced.

If in any doubt as to the cleaning procedure please contact PMD (UK) Limited Technical Department.

1. Half fill tank with clean water.
2. Add required quantity of Zincopass 6 Blue.
3. Top up to working level and mix well.
4. The solution is now ready for use.

PROCESS SEQUENCE

1. Zinc plate.
2. Cold water rinse.
3. Cold water rinse.
4. 0.5% v/v nitric acid.
5. Rinse.
6. Zincopass 6 Blue.
7. Cold water rinse.
8. Hot water rinse.
9. Dry.

MAINTENANCE AND CONTROL

To maintain the recommended operating range small frequent additions of Zincopass 6 Blue should be made. When additions fail to be effective the solution should be discarded and a new passivate made up.

Any components that fall into the passivate solution should be removed immediately. If components are left in solution the bath life will be greatly reduced.

ANALYSIS METHOD

% Concentration

Reagents

Concentrated hydrochloric acid
10% w/v potassium iodide
0.1N sodium thiosulphate (standard volumetric solution)
Iodine indicator

Method

1. Pipette a 25.0ml aliquot of the bath into a 250ml conical flask.
2. Add 50ml DI water.
3. Add 15ml conc. hydrochloric acid.
4. Add 15ml 10% potassium iodide solution.
5. Allow to stand for 5 minutes.
6. Titrate with 0.1N sodium thiosulphate until brown colour fades.
7. Add a few drops of iodine indicator and continue titration to a clear green end point.
8. Record titre = t mls.

Calculation

$t \times 0.36 = \% \text{ concentration Zincopass 6 Blue}$

Replenishment

For every 0.1% required add 1ml/L Zincopass 6 Blue.

NOTES

Zinc thickness

It is important that a minimum thickness of 5 μ m zinc plate is present before passivation.

DISPOSAL

Dispose of in accordance with local authority requirements.

PRODUCT FAMILIES

The following products are referred to in this data sheet.

<u>Product Name</u>	<u>Product Number</u>
Zincopass 6 Blue	237014

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