



Technical Service Data Sheet

Durapass Zinc Dip

Description

Durapass Zinc Dip is a primary zinc phosphating product designed to produce clear whitish finish on zinc plated components.

Features

- **Durapass Zinc Dip** works as passivation in zinc plating line gives zinc coat on surface of steel.
- **Durapass Zinc Dip** is made for dip application

Applications

Durapass Zinc Dip usually used in zinc plating line after zinc deposition on steel.

Physical & chemical Properties

Appearance	Liquid.
Color	clear colorless.
PH (1%) at 25 °C	2.8 ± 0.2
Sp gr. at 25 °C	1.31 ± 0.05
Total acid point(1%)	6.1 ± 0.5(0.1NNaOH)

Equipments

The main process tank can be fabricated from stainless steel or acid resistance material tank is recommended for durability.

Process sequence

- Zinc plating Process (Acid/Alkaline)
- Passivation with **Durapass Zinc Dip**.
- DI Water Rinse.
- Drying

Operating Parameters

Concentration (v/v%)	20 to 25
Temperature (°C)	25-40
Time (Sec)	30 to 60
Total acid point(TAP)	12 to 15
PH at 25 °C	1.8 to 2.1

Initial preparation

For each 100 liter bath ,add 20 to 25 liter of **Durapass Zinc Dip**, mix well and make up to operating level

Reagents & Equipments

- 1.0 N Sodium Hydroxide Solution.
- Phenolphthalein Indicator.
- Conical flask 100 ml.
- Glass Burette 50 ml.
- 10 & 50 ml Pipette

Analysis “Total Acid Points, TAP”

- Take 10 ml **Durapass Zinc Dip** working solution in a conical flask.
- Dilute with 100 ml distilled water.
- Add few drops of phenolphthalein indicator.
- Titrate it against 1.0 N sodium hydroxide solution.
- End point colorless to pink.
- Sodium hydroxide consumed in ml will give TAP.
- Normal range 12 to 15 points.

Precautions

- Carry over should be avoided as much as possible
- Total acid point and pH should be checked at least twice in a shift and especially before replenishment.

Replenishment

Add 1.7 liter of **Durapass Zinc Dip** / 100 lit of operating solution to increase the total acid point by one point.

Storage Information

Storage & Handling

Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not expose to direct sun. Stable nonflammable product. Avoid store near alkaline, alcoholic, reducing materials.
Store in temperature not above 40°C.

Shelf Life

Two years from date of production if stored in normal condition

Packaging Type

HDPE containers, outer sealed with ventilated cap.

Standard Packing

Durapass Zinc Dip is available in 30 Kg cans.

Note: This information is based on our current level of knowledge is given in good faith but it is not intended to guarantee any particular properties. The users must satisfy themselves that there are no circumstances requiring additional information or precautions or the verification of details given herein.
Revised on 31/Dec2019 (ASRN).