

German Metal Surface Treatment Chemicals Co.

Technical Service Data Sheet



Durapass 741

Description

Durapass 741 is a liquid product formulated with chromium trioxide and other additives suitable for post treatment of iron, steel, zinc, and aluminum.

Features

- Durapass 741 passivation gives temporary corrosion protection to substrates after phosphating, cleaning or etching.
- Durapass 741 is suitable for immersion and spray systems and provides extra resistance against corrosion. Improves adhesion and minimizes under film blistering of final finish.
- Durapass 741 is most suitable product for post treatment after iron phosphating, zinc phosphating and etching for substrates like iron, steel, galvanized steel and aluminum.

Applications

Durapass 741 helps in preventing the corrosion attack on substrate by passivation the surface thus provides sufficient safe time for powder coating or any other suitable final finish.

Physical & Chemical Properties

Appearance Liquid.

Color Dark red brown PH (1%) at 25° C 2.85 ± 0.25 Sp.gr at 25° C 1.43 ± 0.05

Total Acid point (1%) 8.5 \pm 0.5 (0.1N NaOH) Miscibility in water Miscible at all ratios.

Operating Parameters

Concentration (ml/1000 liter) 150 to 500 Total acid point 1.2 to 4.5 Temperature(0 C) 20 – 45 Time (sec) 30 – 90 Pressure (Bar) 0.5 to 1.0

Process sequence

- Cleaning and degreasing.
- Rinsing.
- Phosphating with **Duraphos** products.
- Rinsing.
- Passivation with Durapass 741.
- Drying.

Initial Preparation

• Add 150 to 500 ml of **Durapass 741** per 1000 lit of operating volume.

Precautions

- A continuous over flow should be maintained to avoid contamination of rinsing bath.
- It's desirable to maintain the bath with D.I water to avoid salt residue.
- PH should be checked frequently to keep it with in above -mentioned limits.
- Titration point should be checked regularly.
- If titration point is within the limit and pH is not under control then bath should be discarded.



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Equipments

Durapass 741 tanks, pumps, piping should be made of acid resistant stainless steel, PVC.

Reagents & Equipments

- 0.01N Sodium hydroxide.
- Phenolphthalein.
- Pipette 10 ml.
- Erlenmeyer flask 300 ml.
- Burette 50 ml.
- · Distilled water

Analysis "Total Acid Point TAP"

- Take 10 ml solution from Durapass 741 preparation bath in a flask.
- Add 5 to 10 drops of phenolphthalein indicator.
- Titrate against 0.01 N sodium hydroxide solution
- End point color changes to red.
- 0.01 N sodium hydroxide solution ml consumed will give TAP.

Maintain TAP between 1.2 to 4.5 points.

Replenishment

Add 125 ml of **Durapass 741** per 1000 liter of working solution to increase the total acid point by one.

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 741 is available in 35 kg can.

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 here in. Revised: 31/Dec.2019 (ASRN)