# TCJ-50

***Zinc Phosphate "Non-Nickel"***

TCJ-50 is a "Lo-temp" Medium coating zinc phosphate compound used for applying corrosion inhibiting coatings to steel in immersion tanks. Operates at 150 F. Ultra low sludging, up to 75% less.

TCJ-50 is an immersion type product which provides coatings of 1500 (+ /-500) mg/ft². Coatings are applied over steel and subsequently coated with a corrosion inhibiting coating, oil, wax or lubricant. Ultra low sludging.

TCJ-50 provides a dark coating which resists many hours of corrosion resistance in salt spray testing conditions. Premium quality performance. Does not contain EDTA type products. Meeting various industry specifications.

## Features & Benefits

- Lo-temperature processing.
- Providing significant energy heating costs savings.
- Ultra-low sludging for lowest cost & downtime.
- Extended bath life by 3-5 times lowering cost.
- Resistance to iron related problems. Up to 20 points iron.
- Provides dark dense coatings.
- Provides improved corrosion resistance and bonding.
- Eliminates "excess" heat related sludge on coils.
- Effectively coats resistant alloys.

## Physical Data

| | |
|---|---|
| pH | 1 |
| Product Type | Liquid |
| Spec. Gravity | 1.545 |
| lbs./gal. | 12.89 |
| Foam, 0 = Low, 9 = High | 0 |
| Shelf-Life Years | 10 years |
| Freeze Information | Not damaged by freezing. |

## Typical Processing

1. Pre-Clean, Alkaline #2800 or 2444-L, 8% B.V, 8 min., 170 deg. F.
2. Rinse (Or alkaline descaler #399 LR) (as needed per various specs).
3. Acid Pickle, (Hydrochloric or Sulfuric) 8 min optional as needed.
4. Rinse.
5. Preferred Rinse (maintain low conductivity levels in all rinses.)
6. TCJ-50 Zinc, 135-160+ F., 8-20 Min, 35+ points acid (re:5%) Iron up to 20.
7. Rinse.
8. Rinse (No chrome sealers used in this process).
9. Oil option: 10-20% by volume #240, 125 deg. F, 30-60 Sec.)
10. Dry to touch “pre-paint option” #2010, 1-4%, 125 deg F. 30-60 sec.
11. Lubrication option: Loc-Lube #5, 8 oz./gal., 175 deg. F, 4-10 min.

## Packaging

| | |
|---|---|
| Container Type | Poly |
| Net Units | 708 |
| Tare Wt. | 25 lb. |
| Gross Wt. | 733 |
| DOT_Name | UN 3264, Corrosive Liquid, Acidic, Inorganic, N.O.S., (Phosphoric & Nitric Acids), 8, PG II. |
| DOT Hazard | Corrosive. |
| Tarriff ID | 2835.29 |

## Use Parameters

| | |
|---|---|
| Concentration Range | 5% 35-95 (see tests for total) |
| Temperature Range | 135 – 185 deg F. |
| Time Range | 8 – 20 minutes |
| Agitation | n/a |

## Waste Disposal

Treat.

## Holding Tank Materials of Construction

Acid resistant, stainless, or poly.

## Other Information

It is important that the OSHA DATA, "Material Safety Data Sheet" be carefully read and reviewed with the users of this product. OSHA data is required to be posted in the work area by law.

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## Our People. Your Problem Solvers.

**For more information on this process,**
**please call us at 203.756.5521 or email: techservice@hubbardhall.com**

Hubbard-Hall holds certifications for **ISO 9001:2015**, Responsible Distribution, as accredited by the **ACD** (Alliance for Chemical Distributors) and as a **Women-Owned Small Business**, as well as maintaining an association with **Omni-Chem**[136].