

NCS-100, Bonding Treatment

Bonding & Rinse Treatment

NCS-100 is an advanced bonding rinse passivation treatment for Iron and Zinc phosphate treatment processes. Provides an exceptional level of bonding and anti-corrosion properties under paints and coatings. Also for aluminum.

NCS-100 provides a superior surface which is more receptive to painting and coatings. Provides enhanced bonding of all types of coatings. Excellent for aluminum and galvanize metals also.

NCS-100 is cost effective. Non chromated, biodegradable, non-phosphated.

Note: can also be used to improve bonding without conversion coatings present. simply clean surface.

Features & Benefits

- Easy to control. Simple PH 7.8 -11.8 Non-Chromated. (Can be considered for use in military aluminum process spec (MIL C 5541 E) with MIL C 81706 conversion coating non-chrome)
- Operates at a wide chemical use range. (1/10 - 1 % by volume)
- Excellent performance with paints, sealers, adhesives and powder coating.
- Passivates zinc and iron coatings.
- Can be used in spray and immersion applications.

Physical Data

pH	10.0+
Product Type	Liquid
Spec. Gravity	1.0
lbs./gal.	8.34
Foam, 0 = Low, 9 = High	0
Shelf-Life Years	10 years
Freeze Information	Not Damaged by Freezing

Typical Processing

3 stage clean & coat process: (5 stage add alkaline clean & rinse)

- 1) Clean and Phosphate in Bond Guard iron phosphates.
- 2) Rinse
- 3) NCS-100 seal rinse, .1/2% by volume, 120 deg. F., 25 seconds., PH 7.8-11.8



Product Bulletin

Product Name: NCS-100
Product Code: 2204913
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4) Air blow-off. 5) To paint.

*For 5 Stage: Add Alkaline Cleaning

For processing where a final sealer also needs :

- 1) a rinse aid use: NCS-320
- 2) a rinse aid and flash rust RP use: BS-4
- 3) a flash rust RP use: BS-1400

Packaging

Container Type	Poly
Net Units	458.75
Tare Wt.	25
Gross Wt.	490
DOT_Name	Not regulated by DOT.
DOT Hazard	Not regulated.
Tarriff ID	

Use Parameters

Concentration Range	¼-2% typically.
Temperature Range	75 - 150 deg. F.
Time Range	20 sec. – min.
Agitation	Spray or Dip.

Waste Disposal

Neutralize.

Holding Tank Materials of Construction

Steel, 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.



Testing Operating & Trouble Shooting Data

Dropper Procedure:

- 1) Take A 10ml Sample of Solution to Be Tested
- 2) Add 10-12 Drops of Total Alkalinity Indicator
- 3) Add Drop by Drop Of 0.1n Acid Until the Color Changes. Count The Drops.
- 4) The Number of Drops Required Divided By 10 = % By Volume.
Ex) 10 Drops = 1%

Titration Procedure:

- 1) Take A 100ml Sample of Solution to Be Tested
- 2) Add 10-12 Drops of Total Alkalinity Indicator
- 3) Titrate With 0.1n Acid Until the Color Changes
- 4) The Number of Mls Required Multiplied by A Factor Of .25= % By Volume.

Ph Control Range = 7.8 - 11.8

Add Ncs to Raise the Ph as Required

*Note: If Water Quality Is a Concern, Titrate the Source Water to Determine Its Affect on This Procedure And Adjust Accordingly If Needed.

Maintenance Rule:

- A) Decant Final Rinse on a Schedule:
Example: A) Every 1-2 Weeks
- B) Establish Conductivity Upper Limit
- C) After So Many Hours of Processing Re: Every 100 - 200 Hours

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Our People. Your Problem Solvers.

For more information on this process,



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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.