Product Bulletin
Product Name: Eco Quest NCS 170
Product Code: 2205903
Revision Date: February 12, 2024

ECO QUEST NCS 170

NCS 170 offers an advanced cleaning, conversion coating and final rinse passivation in a single product. Moderately Alkaline Zirconium for treatment of Steel, Iron, Zinc and Galvanize. A Nano + Zirconium product.

Provides a superior surface which is more receptive to painting and coatings. Provides enhanced bonding of all types of coatings. Operates at a non acid ph of typically 8.0 - 9.0.

Used in 3 or 5 stage process to provide a level of bonding and anti-corrosion properties under paints and coatings. Superior performance for aluminum and galvanize metals. Resistant to flash rusting for in-process protection. Non chromated, biodegradable, non-phosphated. Highly Cost Effective

Features & Benefits

Easy to control. Simple dilution with water. 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. (.25 - 5 % by volume)
Excellent performance with paints, sealers, adhesives and powder coating.

Passivates zinc and iron Phosphate coatings.
Can be used in spray and immersion applications

Physical Data

Specific gravity	1.02
Product Type	Liquid
PH	8.5
LBs/Gal	8.51
Foam, 0=Low 9=High	0
Shelf Life Years	10 Years

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Operating Conditions/Typical Processing

3 STAGE CLEAN & COAT PROCESS:(5 stage add alkaline clean & rinse)

1) Clean and Bond in iron phosphate, EcoQuest or ZRC "non-phosphate".
2) Rinse
3) NCS-170 treated rinse, 2.0% by volume, 120 deg. F., 25 seconds., PH 8.0-9.0
4) Air blow-off.

*Can Also Be Used As A Stand Alone Pretreatment Product On Steel, Aluminum And Zinc Galvanize. (Requires A Pre-cleaner For Oils / Soils)
Use Rate: 3-6% Typical, 120 Deg.

Packaging

Container Type	POLY
Net Units	630
Tare Wt.	25
Gross Wt.	655
DOT_NAME	UN 3264, Corrosive Liquid, Acidic, inorganic, N.O.S., (Fluorozirconic Acid),8, PG II
DOT Hazard	Corrosive

Use Parameters

Concentration Range	3-6% by volume
Temperature Range	75-150 F.
Time Range	20 sec. – min.
Agitation	Spray or dip

Waste Disposal

NEUTRALIZE, REMOVE FATS, OIL, GREASE

Holding Tank Materials of Construction:

STEEL, STAINLESS OR POLY

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Testing, Operating, & Trouble Shooting Data

Concentration By Field Dropper Test With Total Alkalinity

1) Take A 50 Ml Sample Of Solution
2) Add 5 Drops Of Indicator #2, Total Alkalinity Indicator
3) Add Drop By Drop Of 1.0n Acid (counting The Drops) Until Solution Changes From Green To Pink.
4) The Number Of Drops Required Multiplied By A Factor Of 0.5 = % By Volume
   Ex) 10 Drops = 5%

Concentration By Titration With Total Alkalinity

1) Take A 50 Ml Sample Of Solution
2) Add 5 Drops Of Indicator #2, Total Alkalinity Indicator
3) Titrate With 0.1n Acid Until Solution Changes From Green To Pink.
4) The Number Of Mls Required Multiplied By A Factor Of 0.35 = % By Volume
   Ex) 2.5 Mls = 2%

Ph Control (maintain Ph > 8.5)

Adjust With Small Additions Of Ph Conditioner #4

Conductivity

*Note: Conductivity Based On New / Fresh Bath Make-up (D I Water)
1% = 300 Mhos
2% = 530 Mhos

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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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For more information on this process,
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