Product Bulletin
Product Name: Phos Oil #240
Product Code: 2052101
Revision Date: January 31, 2024

CLEAN & BOND 2086

Advanced Surface Prep & Bonding Treatment

2086 is an advanced surface preparation which provides both cleaning and bonding treatment for surfaces of all metals and plastics. Provides an exceptional level of bonding and anti-corrosion properties under coatings. Used to replace conventional pretreatments of Iron or Zinc Phosphate.

2086 provides a superior surface which is more receptive to painting and coatings. Provides enhanced bonding of all types of coatings. Effective for aluminum and galvanize metals also. Dry in place coating that crosslinks with the base metal and topcoat for excellent adhesion and corrosion protection.

2086 is cost effective. Non chromated, biodegradable. 2086 provides significant cost saving advantages by reducing energy consumption and disposal costs while improving process performance and eliminating phosphates and related chemicals from your process.

Features & Benefits

- Easy to control
- Simple titration
- Replaces Convention Iron Phosphate Pretreatments
- Operates at a wide chemical use range. (.5 - 10 % by volume)
- Excellent performance with paints, sealers, adhesives and powder coating.
- Cleans and prepares for bonding on steel, zinc-galvanize, aluminum and plastic
- Can be used in spray and immersion applications.

Physical Data

pH	10.5
Product Type	Liquid
Spec. Gravity	1.05
Lbs./gal.	8.76
Foam (0=Low; 9=High)	1
Shelf Life	10 years
Freeze Information	Not damaged by freezing

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Typical Processing

1. Pre-Clean: Use Alkaline wash for heavily soiled/Oily Parts.
   OPTIONAL: Use 2086 for lightly soiled Parts.
2. Fresh Water Rinse
3. Final Seal: 2086 @ 1-2%, Ambient-160 deg.F.
   Hot Air Dry

Single Stage Process:

1. #2086, 2-4% by volume, Ambient - 160 F.
2. AIR PRESSURE BLOW-OFF AND DRY.

Packaging

Container Type	Poly
Net Units	481.635
Tare Wt.	25
Gross Wt.	506.635
DOT Name	Not regulated by D.O.T.
DOT Hazard	Not regulated by D.O.T.
Tariff ID	

Use Parameters

Concentration Range	.5-5% by volume
Temperature Range	75-150 deg. F.
Time Range	30-120 seconds
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.

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Testing, Operating & Trouble Shooting Data

CLEAN & BOND EcoQuest 2086
Advanced Surface Prep & Bonding Treatment

Concentration By Dropper Procedure
1) Transfer A 10 Ml Sample,
2) Add 5 - 6 Drops Total Alkalinity #2 (color Will Be Green)
3) Add Drop By Drop Of Test Solution #8 (.1 N Sulfuric Acid) Until Pink.
4) The Number Of Drops Times A Factor Of 0.08 = % By Volume.
Typical Range Can Be 2-25% Per Process Needs And Test Results

Concentration By Titration Procedure
1) Transfer A 10 Ml Sample,
2) Add 5 - 6 Drops Total Alkalinity #2 (color Will Be Green)
3) Titrate With Test Solution #8 (0.1 N Sulfuric Acid) Until Pink.
4) The Number Of Mls Times A Factor Of 1.8 = % By Volume.

Ph Control: Range = 7.8 - 11.8
Add 2086 To Raise Ph As Needed.
Dilute With Water To Lower Ph

Conductivity: 3,400 @ 5%

Nitrogen Test: 1/10
Using Material From Aqua Phoenix (Titrant 1 Drop = 50ppm)
Titrant = Code Apnd2270-p (1 Drop = 50ppm Using A 5 Ml Sample)
Ferroin Indicator = Code Apfe3144-p
Kit Available From Aqua Phoenix: Item # Tk3300-z
- Take A 5 Ml Sample Of Solution To Be Tested.
- Add 3 Drops Of Ferroin Indicator
- Add Drop By Drop Of Titrant, Counting The Drops Required For The Color Change.
- The Number Of Drops Multiplied By 0.154 = % By Volume Of 2086

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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].