

MICRON MC 500, PART #1

MICRON ZINC MAKE-UP

MICRON MC-500 phosphate coating system is a lubrication grade process for steel. Provides extrusion and metal drawing aid. A HYBRID FORMULA for use with POLYMER LUBE PRODUCTS and soaps.

MICRON MC 500 is a two part system (Make-up & Replenisher) that provides a micro crystalline, tightly bonded coating on steel. A zero iron operating system with a unique coating structure for better lubrication.

MICRON MC-500 is an advanced phosphate coating which includes a CATALYST for improved coatings which assist

lubrication whether you are using POLY LUBE or soap.

Features & Benefits

- Lowest use cost. No dump operating system.
- Can be used in coil coating, barrel slug processes, immersion or spray.
- NICKEL FREE FOR ADDED ENVIRONMENTAL ADVANTAGE

- Reduced sludging and scale build-up on equipment.
- Bonds lubricant coatings tighter and more uniform.
- Can be used with all conventional and advanced lubricant coatings.
- Provides wide coating range as required: 500-800 mg/sq.ft.

Typical Processing

1. Pre-clean as required with acid pickling and/or alkaline cleaning.
2. Rinse
3. Rinse
4. Phosphate coat: MICRON MC-500 (Make-up & Replenisher)
Use 7%~ of MAKE-UP = 21 points total acid Part #1 to prepare a new bath.
5. Rinse
6. Hot rinse, 150 F., 30-60 sec., neutralized to ph of 9~ (w/856-L) 7)
7. Lubricant coat: LOC-LUBE SOAP, POLY-LUBE, LIME, OIL ETC.



Product Bulletin

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Product Code: 2202908
Revision Date: January 27, 2026

Specifications

pH	1
Prod._Type	Liquid
Spec.Grav	1.48
LBS./GAL	12.34
FOAM 0=low 9=high	0
Shelf life years:	10
Freeze information	Not damaged by freezing

Packaging

Container Type	POLY
Net Units	680.
Tare Wt.	25 LB.
Gross Wt.	690
Dot_Name	UN 3264, Corrosive Liquid, Acidic, inorganic, N.O.S., (Phosphoric & Nitric Acids),8, PG II,
DOT Hazzard	Corrosive
Tariff ID	n/a

Use parameters

Concentration Range	20-30 Points total acid.
Range	175-190 F.
Time Range	4-10 min.
Agitation	N/A

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.

Waste Disposal

NEUTRALIZE PH, REMOVE FATS, OILS, GREASE AND HEAVY METALS.



Holding Tank Materials of Construction

ACID RESISTANT, STAINLESS OR POLY

Testing, Operating & Troubleshooting data

New Bath Make Up

Fill The Tank With Water, Leaving Enough Room To Add 5% By Volume Of Mc 500 Part 1
Add 1/10% Of Accelerator #40 (1 Gallon Per 1000 Gallons Of Solution)
Mix Well And Begin Heating To Operating Temperature 170-190 Deg.
Begin Using Mc 500 Part 2 To Replenish

Total Acid Points = Range = 25-30 Points (6/10)

Note: To Raise Total Acid Pionts: 1% Part #1 Make-up = 3 Points Total Acid.
1% Part #2 Replenisher = 4 Points Total Acid.

- (1) Transfer 5 Mils To Test Bottle. + 10 - 20 Mls Fresh Water.
- (2) Add 5-10 Drops Of Indicator #1 (phenolthalien)
- (3) Titrate Using .1 N Sodium Hydroxide (test Sol. #10) Until Pink Color Stays.
- (4) Number Of Mls Required =total Acid Points.

Micron Part #2 To Increase Total Acid 4 Points Add 1.0% (1 Gallon Per 100 Of Bath)

Micron Part #1 To Increase Total Acid 3 Points Add 1.0% (1 Gallon Per 100 Of Bath)

Free Acid Points = Range = Determined By Ratio

Same As Above But Use Bromcresol Blue Indicator (color Will Change From Yellow To Blue)
Note: Free Acid Points Will Increase When Adding Concentrate.

Total To Free Acid Ratio: Range = 5.0-7.0

The Bath Should Balance Out In The Recommened Range.
Use Micron Part #1 To Raise The Ratio
Use Micron Part #2 To Lower The Ratio

Accelerator Points: Range =1.0-3.0 Pts.@ .042n Permanganate

Dip Iron Test Paper Into The Bath. Paper Must Remain "white"
This Equals Zero Iron. If The Paper Turns Red It Is On The Iron Side And Must Be
Corrected By Adding Nitrogen Accelerator #40 (add Small Amounts Until Paper
Remains White When Testing.)
Test



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Titration:

- 1) Take A 25 MI Sample
- 2) Add 5-10 Mls Of 50% Sulfuric Acid
- 3) Titrate With 0.042n Or 0.189n Potassium Permanganate (obtain A Permanent Pink Endpoint)
- 4) Number Of Mls Used = Accelerator Points

Accelerator Test:

Accelerator Points Using .042n Permanganate: Typical Range = 1.0-3.0 (1/4% Add = 9 Points)

Accelerator Points Using .189n Permanganate: Typical Range = 0.4-2.0 (1/4% Add = 2 Points)

Decanting, Desludging

****use Part #1 To Replenish Total Acid Lost Due To Decanting

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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

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