Lube Coat MG-22

Manganese Phosphate, with Nickel

MG-22 is a manganese phosphate conversion coating for use on steel and cast iron. Provides a lubricant "break-in" surface coating that prevents metal to metal friction. Used on cams, cranks, gears, bolts, pinions, etc.

MG-22 provides a very hard permanent coating which is used for lubrication, anti-galling and anti-corrosion. Provides a tight grain coating with fine micro finish. Can be used for providing 500-3000 mg/ft2 as needed.

MG-22 is also used for providing a bonding substrate for lubricant coatings to adhere, such as soaps, wax, oil, and polymer lubricants. For a nickel free product see Lube Coat MG-11, MIL DTL-16232g Type M, Chrysler PS-1462, Ford M3P33 A2, GM 4277M, EN 12476.

Features & Benefits

- Ease of control and use.
- A single product which is highly versatile.
- Can be used on steel, cast iron, tool steels, powdered and sintered metal.
- Provides coating weights of 500-3000 mg/ft², as required by process.
- A wide level of coating weights can be obtained depending on requirements.
- Coating resists galling.
- MG-22 can be used with and without a pre-rinse grain refiner, depending on specifications required.

Physical Data

pH	1
Product Type	Liquid
Spec. Gravity	1.30
lbs./gal.	10.84
Foam, 0 = Low, 9 = High	0
Shelf-Life Years	10 years
Freeze Information	Not damaged by freezing.

Typical Processing

1. Alkaline pre-clean metal surface. Must be free of oils, smut.
2. Rinse

3. Acid descale, derust or desmut. (optional if needed)
4. Rinse (optional grain refiner rinse can be used see Toner MG-1 or 2.)
5. MG-22 phosphate. 180-210 deg. F., 4-30 min., 8-18 pts, 8-15% b.v. Fe < 6.0
6. Rinse.
7. Rinse Neutralized (to a pH 8-10, Warm to hot.)
8. Light anti-corrosion oil or optional final finish.
9. Loc-Lube #5, 6, NR-50 (soap coatings), Polymer Lube TL-48, wax, oil. Ideal operating bath is: total acid: 10-12, free acid 2.0-2.5, ratio 5-6, iron < 3.0, temp 190 + F.

Packaging

Container Type	Poly
Net Units	596
Tare Wt.	25 lb.
Gross Wt.	621
DOT_Name	UN 3264, Corrosive Liquid, Acidic, inorganic, N.O.S., (Phosphoric & Nitric Acids), 8, PG II.
DOT Hazard	Corrosive
Tarriff ID	

Use Parameters

Concentration Range	6-15%, by volume.
Temperature Range	160 – 200 deg. F.
Time Range	5 – 30 minutes.
Agitation	n/a

Waste Disposal

Contain and treat for metals, acids

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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