Metal Guard® 914

Metal Guard 914 is a water-based wax emulsion rust preventative offering outstanding lubricity, adhesion, and durability on blackened, phosphate, and bare metal surfaces. It can be applied by dipping, spraying, tumbling, or brushing on.

Metal Guard 914 is normally used as received but may be diluted with water, in special applications, up to 50% by volume. Since it is a water/wax emulsion parts can be processed through it without pre-drying. Some care should be exercised, however, to prevent too great a carryover of water which would, in time, dilute the wax emulsion resulting in a thinner deposit with lower protective quality.

Metal Guard 914 coating will air-dry in a relatively short time. The drying period can be shortened by force drying with warm air or in heated spin dryers. If it becomes necessary to reprocess the parts, the wax coating may be removed in a hot alkaline cleaner or vapor degreaser.

Metal Guard 914 wax emulsion can be contained in plain or lined steel tanks, Stainless Steel, Polypropylene, PVC, or supported polyethylene tanks.

Features & Benefits

Outstanding lubricity, adhesion, and durability	Withstands conditions
Water soluble	Improve cost effectiveness and ease of application
Easily removed with alkaline cleaner	Reversibility

Physical Data

Approximate coverage	1,000 – 2,000 ft^2/Gal
Approximate film thickness (Dip)	< 0.50 mil
Flash point	None
Specific gravity (70°F)	Approximately 1.0
Vapor pressure	Same as water
Percentage of volatility by	None

volume	
Vapor density (air=1)	Same as water
Evaporation rate (ether=1)	< 1
Solubility in water	100%
Appearance and odor	Opaque tan emulsion, mild odor
pH	8.0 – 9.0

Typical Applications

- Final rust preventative after Black Magic coatings, even while still wet from the final rinse.
- Final rust preventative after Hubbard Hall's Mi-Phos zinc phosphate or manganese phosphate coatings.
- Final rust preventative after machining or cleaning operations.
- Final rust preventative on bare steel.

Operating Conditions

Using a handheld Brix Scale Refractometer, simply compare the reading with the control chart below and adjust as necessary with fresh Metal Guard 914. Small additions of Metal Guard 914 should be made to the working bath to replenish volume lost due to the processing of work.

Brix Value	% by Volume
0.0	0
3.0	10
6.5	20
10.0	30
13.5	40
16.0	50
19.5	60
22.5	70
25.0	80
28.0	90

30.0	100

Metal Guard 914 has a pH range 8.0 to 9.0. If required, the pH should be maintained with small periodic additions of Ammonium Hydroxide. Great care should be taken in adjusting the pH.

Waste Disposal

Disposal of spent Metal Guard 914 should be in accordance to all applicable federal, state and local environmental ordinances.

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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

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]