

Metal Guard[®] 320

Metal Guard 320 is an economical and versatile rust-preventative soluble oil, which when mixed with water and heated to 140°F to 150°F leaves a corrosion-resistant, semi-dry film. Metal Guard 320 is typically applied to metal surfaces by immersion, however, it can be brushed or sprayed as well.

Metal Guard 320 is an excellent rust preventive recommended for “dry-to-touch” finish requirements on phosphate surfaces specified for military and automotive applications. A ten percent solution of Metal Guard 320 will provide 250 – 300 hours of ASTM B-117 salt spray protection over a heavy zinc phosphate coating. Metal Guard 320 is also recommended for use on black oxide and bare steel surfaces.

A “dry-to-touch” film is obtained on phosphate surfaces when Metal Guard 320 is used at concentrations of 10% by volume or less.

Metal Guard 320 has a long production life and the concentration can be maintained by adding more Metal Guard 320 and water.

Features & Benefits

High flash point	Can be used in processes where flammability is a concern.
Water emulsified	No VOC's
Adjustable concentration	Final finish can range from oily to “dry-to-touch”

Typical Applications

- Final rust preventative after zinc or manganese phosphate coatings specified for many military and automotive applications.
- Final rust preventative after black oxide coatings.
- Final rust preventative after machining or cleaning operations.

Operating Conditions

Metal Guard 320 is mixed with warm water in the proportions of 5% to 25% by volume, depending upon the final film thickness and dryness desired. The water should be heated from 120°F to 130°F before adding Metal Guard 320.

Control Method

Equipment

100 mL Graduated Cylinder with stopper
Concentrated Hydrochloric Acid

Procedure

1. Measure out 90 mL of Metal Guard 320 in a stoppered graduated cylinder.
2. To that, add 10 mL of concentrated hydrochloric acid.
3. Stopper the cylinder, shake vigorously, vent and allow to stand for 10 minutes.
4. The oil will separate as a dark layer on top.
5. The amount of oil, read off the graduated cylinder, is the percentage of the Metal Guard 320.

i.e., If there are 13 mL of oil, then the concentration of the Metal Guard 320 is 13%.

WARRANTY: THE QUALITY OF THIS PRODUCT IS GUARANTEED ON SHIPMENT FROM OUR PLANT. IF THE USE RECOMMENDATIONS ARE FOLLOWED, DESIRED RESULTS WILL BE OBTAINED. SINCE THE USE OF OUR PRODUCTS IS BEYOND OUR CONTROL, NO GUARANTEE EXPRESSED OR IMPLIED IS MADE AS TO THE EFFECTS OF SUCH USE, OR THE RESULTS TO BE OBTAINED.

Our people. Your problem solvers.

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