

# Metal Guard<sup>®</sup> 320

**Metal Guard 320** is an economical and versatile rust-preventative soluble oil, which when mixed with warm water and heated to 140°F to 150°F leaves a corrosion-resistant, semi-dry film.

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 10% percent solution of Metal Guard 320 will provide 250 to 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.

Metal Guard 320 is typically applied to metal surfaces by immersion, however it can be brushed or sprayed as well.

Metal Guard 320 can be mixed with water, preheated to 120°F to 130°F, in the proportions of 5% to 25% by volume, depending upon the final film thickness and dryness desired.

## Features & Benefits

High flashpoint & Barium free	Improved safety
Low odor	Better working environment
Non-staining	Ease of use
Long production life & variable concentration	Versatile application

## Typical Applications

- Final rust preventative after Black Magic coatings
- Final rust preventative after Hubbard Hall’s Mi-Phos zinc or manganese phosphate coatings
- Final rust preventative after machining or cleaning operations

## Control Method

1. Measure out 90 mL of Metal Guard 320 in stoppered 100 mL graduate 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.

### Example:

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

## Caution

Harmful or fatal if swallowed. Contains petroleum distillates. Use with adequate ventilation. Avoid prolonged or repeated contact with skin. If swallowed, do not induce vomiting. Call a physician immediately.

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## Our People. Your Problem Solvers.

For more information on this process,  
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