

Process Bulletin

**CURTISS -
WRIGHT**

Everlube® Products

Surface Technologies Division

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3001-A Water Based Solid Film Lubricants

Recommended Application Procedure

1. Preparation of Parts to be Coated

- A. Part should be clean, degreased and dry.
- B. Surfaces to be coated should be pretreated in the required way as dictated by the substrate material (See reverse).

2. Preparation of the Everlube 9000 Series Coating Material

- A. Stir the coating material until thoroughly mixed, using a low shear mixing blade, such as a “jiffy” type blade. A mechanical paint shaker may be used but is not recommended because it can cause excessive foaming in waterborne products such as these.
- B. The Everlube 9000 series coatings are sold in a ready-to-apply condition. This means no thinning of the coating should be required. Minor viscosity adjustments can be made by adding deionized water of 1 megohm-cm or greater.
DO NOT USE ORDINARY TAP WATER!
- C. The Everlube 9000 series product should be stored in an environmentally controlled area where the temperature can be maintained between 40° and 90°F (4° to 32°C). These products should never be frozen or exposed to temperature over 100°F (38°C) even for short periods of time.

3. Applying the Coatings

- A. Spraying is the recommended application method, although any conventional painting technique can be used. For spraying, we recommend a conventional spray gun, which utilizes a 0.040” fluid nozzle such as an Anest Iwata W-71, however, equivalent spray equipment may be suitable. HVLP guns are not recommended due to the low atomizing energy of these guns and the high surface tension of water reducible coatings.
- B. For spraying, a line pressure of 30 to 50 psi is recommended. Apply the coating in light, even passes just until the surface of the part begins to look wet. Do not flood the surface. If puddling or window framing occurs, the coating is being applied too heavily. When the wet look disappears from the first coat, apply subsequent coats in the same manner as the first, until you achieve the required coating thickness. (To aid the drying process between coats, you can blow air from the gun across the part surface).
- C. Allow parts to air dry for a minimum of 15 minutes, and preferably for 30 minutes, before curing. Refer to the individual Technical Data Sheet for the correct cure cycle for each coating.

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Application Procedure for Water Based SFL

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4. Clean-Up

Initially clean parts or application equipment with tap water to dissolve any "wet" coating material. Follow-up with methyl ethyl ketone to remove any "dried" (not cured) coating material. It is very important to keep application equipment, especially spray guns, clean.

Recommended Surface Pretreatment, by Substrate Material Type:

Steel (except stainless):	Grit Blast** and Phosphate per DOD-P-16232 Type M or Z
Stainless Steel:	Grit Blast (or chemical etch)** then passivate per MIL-S-5002 or QQ-P-35B
Aluminum:	Anodize per MIL-A-8625, or Grit Blast** and Chromate per MIL-C-5541
Nickel & Chrome Plate:	Grit Blast**
Cadmium or Zinc Plate:	Phosphate per DOD-P-16232 Type Z
Copper or Copper Alloys:	Oxide per MIL-F-495, or Chromate or Grit Blast**
Magnesium:	Dichromate per MIL-M-3171 Type 3, or Anodize or grit blast**
Titanium:	Alkaline clean then anodize (Ti-Cote), or grit blast**

*Volatile Organic Compounds

**For most applications, optimum surface roughness is 32 rms.

/kr: 9/8/04