Revision Date: 04/25/2014

**Technical Data Sheet & Directions** 

NANOMYTE® PT-60

### PRODUCT DESCRIPTION

NANOMYTE® PT-60 is a chromium-free conversion coating formulated for protecting magnesium alloys from corrosion either as a standalone treatment or as a pretreatment before painting, powder coating, or e-coating. Application is typically done by immersion or dipping parts into a bath of PT-60 solution. Touch-ups or repairs may be done by brushing the solution on selected areas of a magnesium part.

#### PHYSICAL CHARACTERISTICS

Form: Liquid

Color: Pale yellow / orange

Odor: Acid-like odor

pH: 3 to 4

Boiling Point: ~100 °C

Specific Gravity: ~1.2

Density (25 °C): No Data Available Viscosity (25 °C): No Data Available Solubility in Water: Very soluble

Percent VOCs by weight: N/A

## **EQUIPMENT, CHEMICALS, & MATERIALS REQUIRED**

- 1. PT-60 (use as-is; shake well or agitate before use)
- 2. Alkaline cleaner
- 3. Glass or plastic processing tanks
- 4. Source of Deionized (DI) water
- 5. Drying holders
- 6. If the operator will be handling the parts after treatment, clean latex / nitrile gloves should be worn and metal parts should be handled with care as to not damage the coating.

# **OPERATING PARAMETERS (for AZ31B Mg Alloy)**

The following process sequence should be conducted at room temperature ( $\sim 20 - 30 \, ^{\circ}\text{C} / 68 - 85 \, ^{\circ}\text{F}$ ):

# Cleaning:

- 1. Metal parts to be treated with the processing solution must be free from grease, oil and other foreign matter before applying treatment.
- 2. All magnesium alloy parts should be cleaned using an alkaline cleaner. Metal parts should be immersed in the cleaner for 10 minutes.

#### **Water Rinsing:**

3. Rinse with DI water for 2 minutes.

#### **Treatment:**

4. Immerse metal parts in PT-60 solution for 1 to 2 seconds.

# Water Rinsing (optional):

5. Rinse by immersing the metal part in DI water in a container for 10 seconds without touching the conversion coating. Do not wipe or rub the coated surface.

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# **Drying:**

6. Dry at room temperature for 30 – 60 minutes, or using a blow dryer until dry. Care should be taken not to damage the conversion coating.

### **STORAGE & HANDLING**

### **Conditions for Safe Storage**

Keep container tightly sealed and store at room temperature (25 °C / 77 °F). Protect from extreme temperature variations. The solution should not be allowed to freeze or be heated above 60 °C / 140 °F. Avoid contamination with incompatible materials.

## **Precautions for Safe Handling**

Appropriate personal protective equipment should be used at all times. Provide good ventilation or extraction. Avoid contact with eyes, skin, and clothing. Avoid inhalation of vapor or mist.

Refer to MSDS for further information.