

# TECHNICAL NOTES

## Graphite Aerosol Product No. 16058

- Aerodag<sup>®</sup> G
- Graphite Lubricating Resistance Coating
- **Description:** Aerodag<sup>®</sup> G, which is supplied in a convenient aerosol can, provides a dry film coating which offers superior lubrication and excellent electrical capabilities. It contains highly refined graphite particles suspended in isopropyl alcohol with a special thermoplastic resin binder. Aerodag<sup>®</sup> G is easy to apply, fast drying at room temperature, and adheres to all substrates compatible with the carrier.
- Aerodag<sup>®</sup> G offers excellent adhesion to most plastics. This feature, combined with high lubricity and electrical properties, makes Aerodag<sup>®</sup> G especially valuable in the design of lightweight electrical/electronic parts. Specific advantages offered by Aerodag<sup>®</sup> G include:
  - High lubricity
  - Excellent adhesion to metals, glass, plastics
  - Good parting ability
  - Fast room-temperature cure
  - Thin film, 0.0003 to 0.0005 inches (0.008 to 0.013 millimeters)
  - Minimum surface pretreatment
  - Compatible with most substrates
  - Good electrical resistivity
  - No ozone-depleting chemicals
- Aerodag<sup>®</sup> G is available in liquid concentrate form as PELCO<sup>®</sup> Conductive Graphite, Prod. No. 16053.
- Typical Applications:
- Lubricating and Parting
- Vacuum lubricant
  - Sliding surfaces
- Mold Release
- Electrical
- Specimen preparation for SEM and EM applications
  - Charge bleed
- Plating nonconductors
- Static Bleed paths
- Shielding

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#### Physical Properties (as supplied):

Lubricant : Graphite

Carrier : Isopropyl alcohol Binder : Thermoplastic resin

Color : Black

Shelf life : Two years from date of qualification under original seal

VOC : 984 g/l

### **Physical Properties (as cured):**

Color : Black

Coefficient of friction : 0.15 (static)

Service temperature : General lubricant – 400°F (204°C)

Electrical – 150°F (65°C)

Intermittent temperature : General lubricant  $-850^{\circ}F$  ( $454^{\circ}C$ )

Sheet resistance : 1.2K ohms/square @ 1 mil

#### **Method of Use: Surface Preparation**

Aerodag<sup>®</sup> G adheres remarkably well to steel, aluminum, stainless steel, glass, copper alloys, rubber, and plastics with a minimum of pretreatment. For best results, substrates should be cleaned with a standard solvent or sandblasted. Substrates should be clean and dry before coating.

### **Application**

Shake the container thoroughly before using. To ensure an even coating, spray about 8-10 inches from the substrate. Four to six light passes should build up the required coating thickness. After use, invert the can and press the button once or twice to clear the nozzle.

#### **Curing**

For general lubrication, the coating supplied by Aerodag<sup>®</sup> G is ready for use when dry to the touch—about 5 minutes at room temperature. For electrical applications, air dry for 30 minutes; or air dry for 5 minutes, then bake for 5 minutes at 170°F (77°C).

**Precautions:** See Material Safety Data Sheet for proper first aid instructions.

Container Size: 10 oz net weight (283.5 grams) aerosol.

Note: Aerodag is a registered trademark of Acheson Industries, Inc.

Aerodag® G does not contain any ozone-depleting chemicals.

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