CONDAT

# G-Start

## Graphite Lubricant / Resistance Coating

### Product Description

**G-Start** contains highly refined graphite particles suspended in ethanol with a special proprietary binder.
**G-Start** is supplied in a convenient 500 ml aerosol package providing a dry film coating, which offers superior lubrication, excellent oxidation protection and outstanding electrical capabilities.
**G-Start** is easy to apply, fast drying at room temperature and adheres to all substrates compatible with the carrier.
**G-Start** offers excellent adhesion to metals and most plastics. This feature, combined with high lubricity and electrical properties makes G-Start desirable in the design of electronic parts.

### Product Features and Benefits

- ✓ HIGH LUBRICITY AND EXCEPTIONAL RELEASE
- ✓ EXCELLENT ADHESION TO METALS, GLASS, PLASTICS
- ✓ GOOD COVERING ABILITY
- ✓ FAST ROOM TEMPERATURE CURE
- ✓ GRANULOMETRIC DISTRIBUTION ALLOWS FILM THICKNESS OF .0003 -.0005 INCHES (.008-.013 MM)
- ✓ DOES NOT CONTAIN HALOGENS OR HYDROCARBONS
- ✓ GOOD ELECTRICAL RESISTIVITY – 1.2K OHMS/SQ @ 1 MIL
- ✓ PROVIDES FASTER START-UPS FOR TOOLING
- ✓ PROTECTS AND CONDITIONS DIES AND MOLDS DURING STORAGE
- ✓ COEFFICIENT OF FRICTION - 0.15 (STATIC)

### Typical Applications

**Lubrication**

Engine Assembly and Run In
Aluminum Extrusion Cold Billet Coating
Permanent Mold Release Coating
Intricate Machine Mechanisms
Assembly of Rubber Components
Die and Mold Protection
Glass Molds

**Electrical**

Pulley Belt Static Charge Bleed
Plating Printed Circuit Holes
Coatings for Cathode Ray Tubes
Shielding
Bleed Paths
Plating Nonconductors
Conductive Coating

# G-Start

## Graphite Lubricant / Resistance Coating

### Physical Properties as Supplied

| DESCRIPTION | METHOD | VALUE |
|---|---|---|
| Lubricant | High Purity Graphite | 10% Solids |
| Appearance / Color | Visual | Black Liquid |
| Shelf Life | Visual | I Year |
| Flash Point | MCC 44 | <20° F |
| Carrier | Visual | Ethanol |
| Particle Size | MCC 177 | D90 < 4 micron |

### Physical Properties as Cured

| DESCRIPTION | METHOD | VALUE |
|---|---|---|
| Lubricant | Graphite | 10% Solids |
| Appearance / Color | Visual | Black |
| Coefficient of Friction | ASTM | 0.15 Static |
| Sheet Resistance | ASTM | 1.2 K ohms/sq @ 1 mil |
| Service Temperatures | As a lubricant | 400° F (204° C) |
| | As electrical coating | 150° F (65° C) |
| Intermittent Temperature | As a lubricant | 850° F (454° C) |

** MCC = CONDAT's Control Method*

### Method of Use

**Surface Preparation**

**G-Start** adheres remarkably well to steel, aluminum, stainless steel, glass copper alloys, rubber and plastics, with a minimum of pretreatment. For optimum results, substrates should be cleaned with a solvent. Surfaces should be clean and dry before coating.

**Application**

The container should be shaken thoroughly before using. To ensure an even coating, spray about 8-10 inches from the substrate. Several light passes should apply the required coating thickness. After use, clean the nozzle by inverting container and pushing nozzle down until clear.

**Curing**

For general lubrication, the G-Start coating is ready for use when dry to the touch – approximately 3 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**

G-Start is flammable. Do not use near sparks, heat or open flame. Use with adequate ventilation. Refer to Material Safety Data Sheet for first aid instructions.