



## Insulative Varnish for High Voltage Electrical Parts

MG Chemicals Insulation Coatings line is a unique line of varnish for electronics products intended to provide added insulation to high voltage parts such as transformer coils, motor windings and sheathing for wires. Characterized by high dielectric strength, these 1-part coatings adhere to a variety of substrates and offer exceptional protection against corrosion.

### Features & Benefits

- High dielectric strength
- Excellent resistance to moisture and salt water
- Excellent finish—tough, flexible, glossy, and durable

### Applications

- Replacement for shrink wrap or electrical tape
- Arc and corona resistance for transformer coils and motor windings
- Insulation coatings for electrical generators

### Clear Insulating Varnish

- 4226** • Meets UL EIS standards. Class H insulation up to 180 °C
- Dielectric strength: 4 100 V/mil
- 4226A** • Low VOC and HAP-free
- Toluene, xylene and MEK-free
- Dielectric strength: 3 000 V/mil

### Dielectric Coating

- 4228** • Meets UL EIS standards. Class H insulation up to 180 °C
- Dielectric strength: 3 000 V/mil
- Direct cross to Glyptal 1201A

### Red Insulating Varnish

- 4228A** • Dielectric strength: 3 700 V/mil
- Low VOC and HAP-free
- Available as both a liquid and aerosol

# Insulation Coatings



|  | 4226                              | 4226A  | 4228   | 4228A  |
|--|-----------------------------------|--|--|--|
| <b>PROPERTIES</b>  |                                   |  |  |  |
| Dielectric Strength (dry)  | 4 100 V/mil                       | 3 000 V/mil  | 3 000 V/mil  | 3 700 V/mil  |
| (wet)  | 3 000 V/mil                       | —  | 1 500 V/mil  | —  |
| Insulation Class   | 130 (B)<br>150 (F)<br>180 (H)     | —  | —  | —  |
| Service Temperature Range  | -40–180 °C                        | -30–180 °C   | -40–180 °C   | -40–180 °C   |
| Dry to Touch   | 20 min                            | 1 h  | 30 min   | 1 h  |
| Recoat Time  | 4 h                               | 15 min   | 4 h  | 10 min   |
| Recommended Film Thickness   | 25–38 µm                          | 25–38 µm   | 25–38 µm   | 25–38 µm   |
| Theoretical Coverage @ 25 µm<br>(based on 65% transfer efficiency) | 95 ft <sup>2</sup> /L             | 100 ft <sup>2</sup> /L   | 130 ft <sup>2</sup> /L   | 130 ft <sup>2</sup> /L   |
| Viscosity @ 25 °C  | 77 cP                             | 50 cP  | 590 cP   | 800 cP   |
| Density  | 0.93 g/mL                         | 0.96 g/mL  | 1.1 g/mL   | 1.0 g/mL   |
| Percent Solids   | 35%                               | 45%  | 52%  | 55%  |
| Shelf Life   | 5 y                               | 5 y  | 5 y  | 5 y  |
| Calculated VOC   | 604 g/L                           | 520 g/L  | 514 g/L  | 561 g/L  |
| <b>PACKAGING</b>   |                                   |  |  |  |
| Format   | 55 mL (Bottle)<br>945 mL (Bottle) | 55 mL (Bottle)<br>426 mL (Aerosol)<br>945 mL (Can)<br>3.78 L (Can) | 55 mL (Bottle)<br>225 mL (Can)<br>850 mL (Can)<br>3.60 L (Can) | 55 mL (Bottle)<br>225 mL (Can)<br>850 mL (Can)<br>3.60 L (Can) |

