

## Technical Specifications

### 422A-1L / 4L / 20L Liquid

#### Silicone Conformal Coating (Liquid)

MG Chemicals 9347-193rd Street, Surrey, BC, Canada V4N 4E7 Phone 1.800.201.8822 Fax 1.800.708.9888



#### Description:

Silicone resin protective coating for applications where temperature or flexibility is a concern.

#### Applications:

Protecting printed circuit boards against static discharge, arcing, moisture, humidity, corrosion, and thermal shock.

#### Features/Benefits:

- ✓ Contains a UV indicator to confirm application.
- ✓ Easy to repair.
- ✓ Clean up with MG Chemicals CAT #435 Thinner Cleaner.
- ✓ Better at more extreme temperatures.
- ✓ CSA Approved (file #LO 4000-4068)
- ✓ UL Approved

<b>Technical Data:</b>	<i>Physical Properties:</i>
	Service gravity of liquid: 0.96
	Liquid viscosity: 15 centistokes
	Percent solids by weight: 25% (liquid), 15% (aerosol)
	Dry to touch time: 30 minutes
	Cure time: 72 hours
	<i>Electrical Properties:</i>
	Dielectric Constant (100MHz): 2.7
	Dielectric Strength (kV/mm): 80
	Loss angle tangent (100MHz): 0.0014
	Volume resistivity (Ohm-cm): 1x10

#### Chemical Components:

Silicone Resin  
2-propanone (67-64-1) (Solvent)  
Methyl ethyl ketone (78-93-3) (Solvent)  
Xylene (1330-20-7) (Solvent)

#### Health Awareness:

Contents may be harmful. Fumes may be harmful. Contents may catch fire. Use proper ventilation, eye, and hand protection.

#### Directions:

Refer to Material Safety Data Sheet (MSDS) before use. It is recommended to test the product before use.

All surfaces must be clean, dry, and free of dust, grease, oil, etc... If you are touching up or spraying over conventional finishes, test for compatibility. Mix thoroughly before thinning. Dilute with MG Chemicals CAT # 435 Thinner/Cleaner. However

this viscosity is applying apparatus specific and thus should be adjusted accordingly. Higher viscosities will result in thicker coatings.

At room temperature the product will be tack free in approximately 30 minutes, and full cure will be achieved in approximately 72 hours. Curing may be accelerated by applying moderate heat with either a convection oven or infrared lamps. We recommend curing in a convection oven at 65°C (149°F) for one hour, but other temperature and time combinations can work as well. Heat curing will improve the physical strength of this coating.

#### Shipping Information:

Packaged in durable 1 liter metal cans with proper headspace to ensure there are no accidents during shipping.

**Ground:** (all sizes 4 liters or less) Consumer Commodity, ORM-D

**Ground:** - Large Sizes: (all sizes larger than 4 litres)  
Shipping Name - Paint related material, Class 3, UN# 1263, Packing Group II, Subsidiary Risk - nil, Use only MG Chemicals U.N. certified outer cartons. Tape all seams on the carton. Hazard Label required - Flammable Liquid. A double arrow orientation label is required and is already printed on the original outer carton. The shipper must be trained and certified to handle documented dangerous goods. References - CFR 49, IATA, Transport Canada TDG.

**Air within continental USA:** (all sizes 4 liters or less)

**Federal Express:** Complete Fed Ex dangerous goods declaration, Shipping name - Consumer Commodity, Class - ORM-D, UN # - n/a (leave blank), Packing Group - n/a (leave blank), Sub Risk - n/a (leave blank), Packing Instructions - n/a (leave blank), Authorization - n/a (leave blank). Use M.G. Chemicals UN certified outer carton. A double arrow orientation label is required and is already printed on the original outer carton. Change the ORM-D marking on the outer carton to ORM-D-AIR, Tape all seams on the carton.

**UPS:** Complete UPS forms marked "Hazardous Materials Shipping Paper" and "Shipper's Certification for Hazardous Materials" with the following information: Shipping Name - Consumer Commodity, Hazard Class - ORM-D, Label Type - ORM-D-AIR. Use M.G. Chemicals UN certified outer carton. Change the ORM-D marking on the outer carton to ORM-D-AIR, Tape all seams on the carton. Refer to UPS guide for shipping hazardous materials.

**All other air:** (all sizes 4 liters or less)

Shipping Name - Consumer Commodity, Class 9, ID# 8000,

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Packing Group - n/a (leave blank), Sub risk - n/a (leave blank),  
Packing instruction - 910, Authorization - n/a (leave blank),  
Emergency - phone (613) 996-6666 collect. Use M.G. Chemicals  
UN certified outer carton. A double arrow orientation label is  
required and is already printed on the original outer carton.  
Add a class 9 diamond label to outer carton, and mark ID# 8000  
below consumer commodity. Tape all seams. For further  
information refer to IATA regulations, or phone M.G. Chemicals  
technical service at 1-800-201-8822.

**All other air Including Continental USA** - Large sizes (all sizes  
larger than 4 liters) Shipping Name - Paint related material,  
Class 3, UN# 1263, Packing Group II, Subsidiary Risk - nil, IATA  
Packaging Instructions - 305, Use only MG Chemicals U.N.  
certified outer cartons. Tape all seams on the carton. Hazard  
Label required - Flammable Liquid. A double arrow orientation  
label is required and is already printed on the original outer  
carton. The shipper must be trained and certified to handle  
documented dangerous goods. References - CFR 49, IATA,  
Transport Canada TDG.

#### **Sea - All Sizes:**

Shipping Name - Paint related material, Flash point -18C, Class  
3, UN# 1263, Packing Group - II, Vessel Storage - stow clear of  
living quarters, stow away from sources of heat, may be stowed  
on deck or under deck on a cargo vessel, must be stowed on  
deck on a passenger vessel. Use M.G. Chemicals UN certified  
outer carton. Hazard Label required - Flammable Liquid. A  
double arrow orientation label is required and is already  
printed on the original outer carton. Tape all seams. Emergency  
- phone (613) 996-6666 collect. For further information refer to  
IMO regulations or phone M.G. Chemicals technical service at 1-  
800-201-8822.

#### **Availability:**

422-1L 950mL (1quart) Liquid  
422-4 4L (1gal) Liquid  
422-20 20L (5.3gal) Liquid  
422A-340G 340g (12oz) Aerosol (see Silicone Conformal Coating 422A)  
422A-P 5mL (0.16 oz) Pen

#### **Technical Support: MG Chemicals**

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