

## Description

4229 *Connector Coating* is a solvent-based, modified thermoplastic liquid coating used as a replacement for electrical tape and shrink wrap. It dries to a durable, flexible, moisture resistant, and rubber-like coating to protect exposed wires, metals, and plastics.

4229 insulates and protects electrical connections, valve handles, rope ends, battery terminals, tools, and sheet metal.

## Benefits and Features

- **Meets ASTM E-96 moisture resistance**
- **Meets ASTM B-117 salt spray test**
- **Meets ASTM G53-84 accelerated 10-year weather test**
- **Highly flexible**
- **Will not chip or crack**
- **Good adhesion**
- **Suitable for use in food facilities as a non-food chemical**—certification available on request

## Usage Parameters

<i>Properties</i>	<i>Value</i>
Tack Free	5 min
Recoat Time	20 min
Dry to Handle	4 h
Full Cure @25 °C [77 °F]	24 h
Shelf Life	3 y

## Temperature Ranges

<i>Properties</i>	<i>Value</i>
Constant Service Temperature	-35 to 95 °C [-31 to 203 °F]
Storage Temperature <sup>a)</sup>	8 to 21 °C [46 to 70 °F]

a) The product should not be exposed to direct sunlight.

## Cured Properties

<i>Physical Properties</i>	<i>Method</i>	<i>Value</i>
Color Moisture Resistant	Visual ASTM E-96	Black Excellent
<i>Mechanical Properties</i>	<i>Method</i>	<i>Value</i>
Hardness Elongation Tensile Strength	ISO 868 ISO 527-2 ISO 527-3	70 Shore A 450% 17.9 N/mm <sup>2</sup> [2 590 lb/in <sup>2</sup> ]
<i>Electrical Properties</i>	<i>Method</i>	<i>Value</i>
Dielectric Breakdown Strength	IEC 60243-1	11.8 kV/mm [300 V/mil]

## Properties of Uncured 4229

<i>Physical Properties</i>	<i>Method</i>	<i>Value</i>
Viscosity @25 °C [77 °F] Solids Content (w/w) Density Flash Point Odor	ASTM D93	3 970 mm <sup>2</sup> /s 35% ±1% 0.83 g/mL -19.5 °C [-3.1 °F] Aromatic hydrocarbon

## Compatibility

**Adhesion**—The 4229 coating is not compatible with contaminants like water, oil, and greasy flux residues that may affect adhesion. If contamination is present on the substrate, clean the surface first.

## Substrate Adherence Compatibility

- Metals
- Most plastics
- Glass
- Epoxy glass
- Glass
- Concrete
- Fabric
- Foam rubber
- Fiberglass
- Masonry
- Rubber
- Wood

It is always recommended to perform a compatibility test on a non-critical test area prior to large scale applications.

## Health, Safety, and Environmental Awareness

Please see the 4229-Liquid **Safety Data Sheet** (SDS) for more details on transportation, storage, handling and other security guidelines.

## Application Instructions

The 4229 can be easily applied by dip, spray gun, or brush. Follow the procedure below for best results.

### Prerequisites

- Ensure surface to be coated is clean: oil free, dust free, and rust free
- (Optional) Roughen surface with steel wool or fine abrasives to increase adhesion

### To coat by dipping method

1. Hang or clamp object on a dipping arm.
2. Immerse object slowly.
3. Let dwell for 2 minutes to allow for penetration.
4. Withdraw slowly at approximately 2.5 cm per 5 seconds.
5. Wait at least 20 minutes at room temperature before recoat to avoid solvent entrapment.
6. Repeat steps 2 to 6 if higher thickness required.

### To coat by spray gun method

Industrial airless or pressure pot gun is recommended for large applications. Do not use a Siphon gun.

### Spray Setting Recommendation

Gun Type	Pressure
Airless gun	40 to 60 psi
Pressure pot gun	20 psi

1. At a distance of 25 to 30 cm (9.8 to 11.8 inches), spray a thin and even coat onto the part. For best results, use spray-and-release strokes with an even motion to avoid excess paint in one spot.
2. Wait at least 20 minutes at room temperature before recoat to avoid solvent entrapment.
3. Repeat steps 1 to 6 if higher thickness required.

**NOTE:** Applying 2 to 3 coats will give approximately 12 mil thickness.

### To coat by brush method

1. Brush surface in one direction only.
2. Several coats are recommended. Wait at least 20 minutes at room temperature before recoat to avoid solvent entrapment.
3. Repeat steps 1 to 2 if higher thickness required.

**ATTENTION:** Using excessive coat thickness can cause defects.

### To air dry the coating

- Let air dry 24 hours

## Packaging and Supporting Products

<i>Cat. No.</i>	<i>Packaging</i>	<i>Net Volume</i>		<i>Net Weight</i>		<i>Packaging Weight</i>	
<b>4229-55ML</b>	Bottle	55 mL	1.86 fl oz	45.6 g	1.61 oz	0.4 kg <sup>a)</sup>	0.8 lb <sup>a)</sup>
<b>4229-1L</b>	Can	945 mL	1.99 pt	784 g	1.72 lb	1.1 kg <sup>a)</sup>	2.5 lb <sup>a)</sup>
<b>4229-4L</b>	Can	3.78 L	1 gal	3.13 kg	6.91 lb	4.7 kg	10 lb

a) Case pack of 5

## Technical Support

Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at [www.mgchemicals.com](http://www.mgchemicals.com).

Email: [support@mgchemicals.com](mailto:support@mgchemicals.com)

Phone: +(1) 800-340-0772 (Canada, Mexico & USA)

+ (1) 905-331-1396 (International)

Fax: + (1) 905-331-2862 or + (1) 800-340-0773

Mailing address: **Manufacturing & Support**  
1210 Corporate Drive  
Burlington, Ontario, Canada  
L7L 5R6

**Head Office**  
9347-193rd Street  
Surrey, British Columbia, Canada  
V4N 4E7

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