

# Specialty Coatings

## *Dow Corning*<sup>®</sup> 1890 Protective Coating

### FEATURES

- Provides excellent moisture resistance and protection from sand and dust particles
- Ease of handling (can be applied in the field or shop by brushing or spraying)
- Good electrical insulating properties
- Adhesion to painted or unpainted metal, glass and wood surfaces
- Room temperature cure
- Flexibility from -75 to 350°F (-59 to 177°C) for continuous use and up to 400°F (204°C) for intermittent use
- Resistance to ultraviolet radiation, weathering
- Tack-free within 25 minutes; forms rubbery overcoat in a few hours
- FDA 21 CFR 177.2600

### BENEFITS

- Electrical equipment completely coated with *Dow Corning* 1890 Protective Coating can be readily cleaned by hosing with water

### COMPOSITION

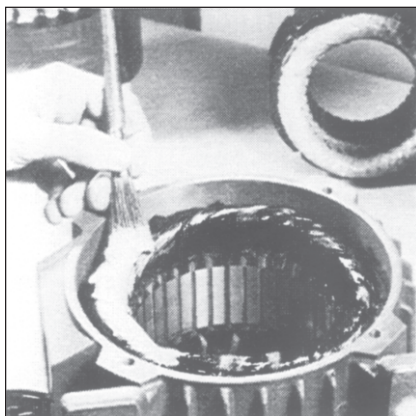
- One-part silicone rubber coating
- Supplied as a thick liquid, cures to a rubbery solid

### One-part, protective silicone rubber coating for motors and electrical equipment

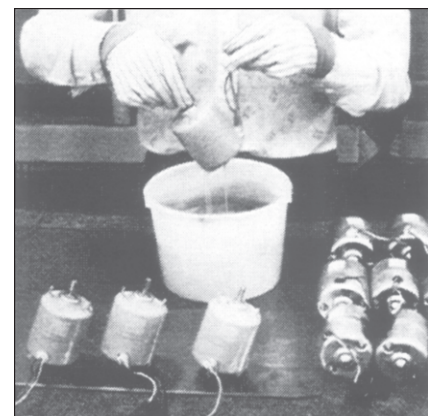
#### USES

*Dow Corning* 1890 Protective Coating is a general purpose coating material providing extra protection to such electrical equipment as:

- Motor stator windings – Protects insulated motor windings from: dust occurring in quarries, cement plants, mines, taconite mills; moisture in dairies, food processing plants, paper mills, bottling plants; chemicals in tanneries, packing and dye houses, fertilizer plants
- Bus bars – Exposed bus bars can be quickly coated by brushing on *Dow Corning* 1890 Protective Coating
- Splices and connectors – Provides insulated splices with additional protection against ultraviolet radiation, water and moisture; exposed connections covered with this coating are protected against contaminants and corrosive fumes
- Transformers – Insulates the tops of distribution transformers and prevents short circuits caused by animals bridging between exposed terminals and the grounded tanks; also prevents short circuiting caused by birds or animals on other equipment
- Wooden pole tops and insulator pins – Prevents pole-top damage resulting from weathering and moisture when used to seal the end-grains of wooden poles; applied to wooden insulator pins and crossarms; prevents damage due to current tracking and subsequent burning



*When brushed over electric motor stator coils, Dow Corning 1890 Protective Coating provides moisture protection and protection from dust particles thrown against the coils by the motor cooling fan.*



*Dow Corning 1890 Protective Coating protects a fan motor for a farm tractor air conditioning system, sealing minute openings at the butt seal of the formed-steel split housing and at the holes for threaded studs. Fine dust is prevented from entering and attacking the fan motor bearings.*

## TYPICAL PROPERTIES

These values are not intended for use in preparing specifications.

Test	Unit	Result
Color		Gray
Average Build per Dip	mils	25-30
Thinner		VM&P Naphtha
Skin-Over Time	minutes	15
Tack-Free Time	minutes	25
Viscosity	poise	400
Durometer Hardness, Shore A	points	21
Flash Point, closed cup	°F (°C)	50 (10)
<b>Electrical Properties – As Cured 7 days at 77°F (25°C) and 50% RH</b>		
Dielectric Strength	volts/mil	430
Dielectric Constant		
100 Hz		2.5
100 kHz		2.5
Dissipation Factor		
100 Hz		0.00007
100 kHz		0.000181
Volume Resistivity	ohm-cm	$2 \times 10^{15}$

**Specification Writers:** Please obtain a copy of the Dow Corning Sales Specification for this product and use it as a basis for your specifications. It may be obtained from any Dow Corning Sales Office, or from Dow Corning Customer Service in Midland, MI. Call (517) 496-6000.

## USE LIMITATIONS

Dow Corning 1890 Protective Coating is not recommended:

- For continuous underwater immersion where adhesion or structural bonding is required
- On concrete, brick, mortar or other masonry surfaces
- On surfaces to be painted; paints do not adhere well to sealant (paint before applying sealant)
- On materials such as impregnated woods or oil-based caulks that bleed oils
- In totally confined areas; atmospheric moisture is required for cure
- On *Teflon*<sup>®1</sup>-coated materials, polyethylene, polypropylene or methylmethacrylate (*Plexiglas*<sup>®2</sup>); sealant will not adhere well
- On or near sensitive metals such as copper, brass, zinc, carbon steel, galvanized iron or magnesium; these metals may be corroded, especially in confined cure conditions, due to the acetic acid released during the cure

This product is neither tested nor represented as suitable for medical or pharmaceutical use.

<sup>1</sup>Registered trademark of E.I. du Pont de Nemours Co.

<sup>2</sup>Registered trademark of Pittsburgh Plate Glass.

## LISTINGS/SPECIFICATIONS

- FDA 21 CFR 177.2600

## HOW TO USE

Clean and dry all surfaces to be coated before applying this coating. *Dow Corning* 1890 Protective Coating can be applied as received by brushing on with a stiff-bristle nylon brush. If spraying is preferred, this dispersion can be thinned with VM&P naphtha to provide the optimum viscosity required for spraying equipment. Only normal brushing or spraying techniques are needed.

## SHIPPING LIMITATIONS

DOT Classification: Flammable liquid.

## STORAGE AND SHELF LIFE

When stored at 90°F (32°C), *Dow Corning* 1890 Protective Coating has a shelf life of 12 months from date of manufacture. Refer to product packaging for “Use By” date.

## PACKAGING

*Dow Corning* 1890 Protective Coating – Gray is supplied in 1- and 4.5-gal (3.8- and 17-L) pails.

## SAFE HANDLING INFORMATION

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY WRITING TO DOW CORNING CUSTOMER SERVICE, OR BY CALLING (517) 496-6000.

## WARRANTY INFORMATION – PLEASE READ CAREFULLY

The information contained herein is offered in good faith and is believed to be accurate. However,

because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that *Dow Corning*'s products are safe, effective, and fully satisfactory for the intended end use.

*Dow Corning*'s sole warranty is that the product will meet the *Dow Corning* sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted. *Dow Corning* specifically disclaims any other express or implied warranty of fitness for a particular purpose or merchantability. Unless *Dow Corning* provides you with a specific, duly signed endorsement of fitness for use, *Dow Corning* disclaims liability for any incidental or consequential damages. Suggestions of use shall not be taken as inducements to infringe any patent.

