

BONDERITE S-FN GP 1904 ACHESON DRYFILM COATING (KNOWN AS EMRALON GP 1904)

Issued 7/24/2013

DESCRIPTION

BONDERITE S-FN GP 1904 ACHESON (known as EMRALON GP 1904) is a dispersion of PTFE and graphite in a thermosetting binder designed to be applied by spray, brush, or dip. **BONDERITE S-FN GP 1904 ACHESON (known as EMRALON GP 1904)** produces a low friction coating with excellent resistance to corrosion and solvents. The wide range of cure temperatures 149° to 260°C (300° to 500°F) allows **BONDERITE S-FN GP 1904 ACHESON (known as EMRALON GP 1904)** to be used on wood, rubber and many plastics and on engineering metals. **BONDERITE S-FN GP 1904 ACHESON (known as EMRALON GP 1904)** is a one-package product and is not affected by low temperature storage conditions.

FEATURES

- Satiny finish
- Low coefficient of friction
- Remains flexible over a wide range of temperatures
- Good release properties with a low coefficient of friction
- Consistent and uniform dip spin or spray application performance

BENEFITS

- Attractive component appearance to secure customer satisfaction
- Ability to meet lubrication requirements for the component
- Application for a variety of environmental performance requirements
- Ability to meet lubrication and assembly requirements for the component and application
- Versatile application techniques to minimize operation costs for application

TYPICAL APPLICATIONS

- Fasteners
- Sliding rails
- Lock mechanisms
- Seat belt components
- Latches
- Mechanisms

TYPICAL PROPERTIES (of wet product)

Color:	black
Pigment:	PTFE and graphite
Binder:	thermoset
Carrier:	MEK or Bonderite L-FG SB-2 Acheson (known as Acheson SB-2 solvent)
Diluent:	MEK or Bonderite L-FG SB-2 Acheson (known as Acheson SB-2 solvent)
Consistency:	liquid
Viscosity:	100 mPa·s
Density:	0.96 kg/l (8.0 lb/gal)
Solids content by weight:	25%
Flash point:	8°C (46°F)
VOC:	720.0 g/l (6.0 lb/gal)
Theoretical coverage:	6.81 m ² /kg @ 25 μm (266 ft ² /gal @ 1mil) dry film thickness



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TYPICAL PROPERTIES

(as cured)

Color:	black
Coefficient of friction:	0.08 – 0.10 static
Service temperature	
-continuous:	149°C (300°F)
Salt spray resistance:	>96 hours over zinc phosphated surface, 25 micron film
(ASTM B 117)	thickness

METHOD OF USE**Surface Preparation**

For maximum resistance wear, corrosion and abrasion, the following procedures are recommended:

Steel: Degrease, grit blast, and/or chemically pre-treat with Bonderite M-ZN 20 (known as Granodine 20), Bonderite M-MN 2 (known as Lubrite 2), or equivalent.

Stainless Steel: Degrease grit blast

Aluminum: Degrease, pre-treat with Bonderite M-CR 1200S (known as Alodine 1200S) or equivalent, anodize.

Mixing

BONDERITE S-FN GP 1904 ACHESON (known as EMRALON GP 1904) can be spray applied undiluted. However to obtain maximum smoothness, dilute the product with Methyl Ethyl Ketone (MEK) or Bonderite L-FG SB-2 Acheson (known as Acheson SB-2 solvent) in the ratio of three parts product (by weight) to one part solvent. If parts are to be dipped, a 3:2 (product:solvent) weight ratio is recommended. If dip-spin equipment is used, adjust the product to 20-30 seconds on a #2 Zahn cup (neat product may already be in this range).

Application

Use an external-atomizing spray gun with 35-50 psi air pressure and adjust the gun to give a well-atomized spray. For optimum performance, the final coating thickness should be 0.0003-0.0010 inches (0.008 to 0.025 millimeters). When properly applied, the coating will be even and free of runs, blisters, or "fish eyes." Some electrostatic spray systems may be used to apply **BONDERITE S-FN GP 1904 ACHESON (known as EMRALON GP 1904)**. Contact Henkel's Technical Finishes Department for details. **BONDERITE S-FN GP 1904 ACHESON (known as EMRALON GP 1904)** can also be applied by dipping. The product should be diluted 3:2 (product:solvent) by weight with MEK. The average dip coating will produce a heavier coat, but a pre-cure of ten minutes at 121° to 135°C (250° to 275° F) or one minute at 177°C (350°F) is required between dips. Dip-spin will require two or three coats. A partial cure of one minute at 177°C (350°F) is required between coats.

Curing

For optimum results, **BONDERITE S-FN GP 1904 ACHESON (known as EMRALON GP 1904)** should be cured at 149°C (300°F) for 60 minutes, 177°C (350°F) for 10 minutes, or 204°C (400°F) for 8 minutes (substrate temperatures).

STORAGE/ HANDLING

Keep from freezing. Keep container tightly closed when not in use. Store in a cool, well ventilated area. Keep away from heat, sparks, and open flame. Protect material from direct sunlight. Ground and bond containers when transferring materials. Empty containers may retain hazardous properties. Follow all MSDS/label warnings even



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after container is emptied.

APPLICATION ASSISTANCE

Henkel's Application Specialists are available to assist you in production start-up with **BONDERITE S-FN GP 1904 ACHESON (known as EMRALON GP 1904)**. Visit our website www.henkelna.com/metals for more information and for the Henkel global location nearest you.

HEALTH & SAFETY

Please consult Material Safety Data Sheet.

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