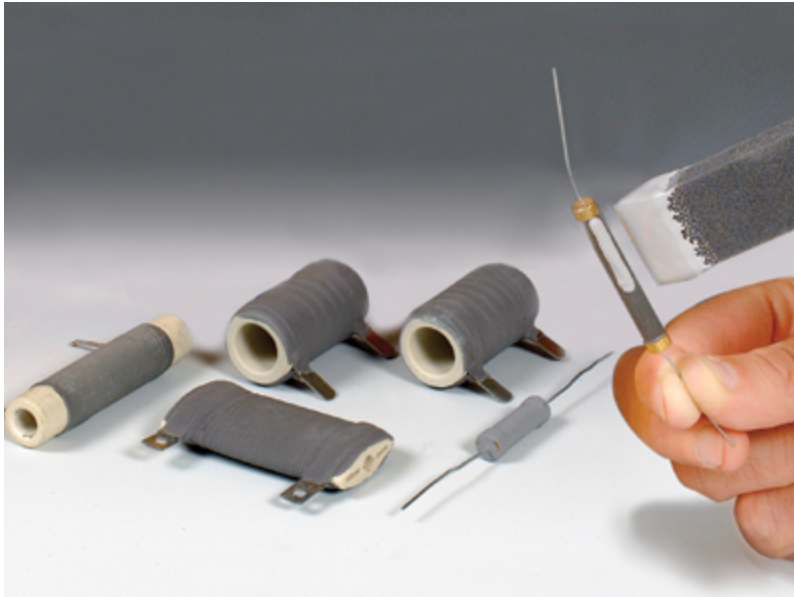




## HIGH TEMPERATURE ELECTRICAL COATINGS & SEALANTS

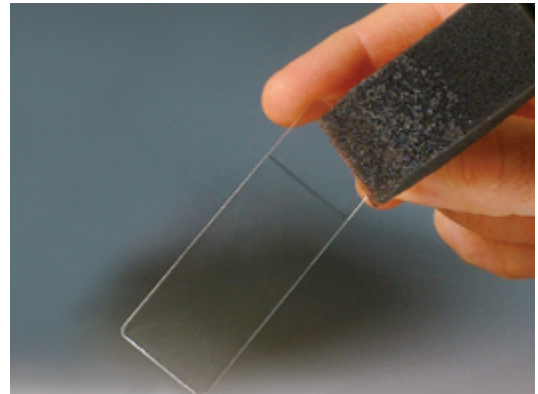
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Cerama-Dip™ 538N coats resistors.



Ceramacoat™ 512-N insulates circuit breaker screw.



Aremco-Seal™ 529 transparent sealer.

### PRODUCT HIGHLIGHTS

#### Ceramic-Inorganic

**512-N** Viscous, off-white, electrical insulation paste for circuit breakers, power resistors and solenoids to 2400 °F (1316 °C).

**538-N** Low viscosity, light gray, electrical insulation coating for high power resistors and rheostats to 2400 °F (1316 °C). Black and green pigments also available.

#### Silicone

**529** Transparent silicone sealer with exceptional electrical and moisture resistance to 800 °F (427 °C). High viscosity (HV) and very high viscosity (VHV) versions available.

#### Silicone-Ceramic

**4030** Translucent-white, low-viscosity sealer for porous materials to 900 °F (482 °C).

**CP4040** Low viscosity, white, electrical insulation coating for motor windings to 1100 °F (593 °C).

**CP4050** Low viscosity, green, electrical insulation coating for power resistors to 1100 °F (593 °C).

#### Silicone-Glass

**SGC4000** Silicone-glass-ceramic, gray, low viscosity, scratch resistant coating 900 °F (482 °C).

**SGC4000-HT** Silicone-glass-ceramic, gray, low viscosity, scratch resistant coating 1400 °F (760 °C).

#### Glass

**GC4000** Glass-enamel, gloss-black coating for stainless steel to 1000 °F (538 °C).



Cerama-Dip™ 538N-BLK coats rheostats.



## HIGH TEMPERATURE ELECTRICAL COATINGS & SEALANTS

Type	CERAMIC-INORGANIC				SILICONE-CERAMIC			SILICONE			SILICONE-GLASS		GLASS
Product Number	512-N	538-N	538-N-BLK	538-N-GRN	4030	CP4040	CP4050	529	529-HV	529-VHV	SGC4000	SGC4000-HT	GC4000
Tradename	Ceramacoat™		Ceram-Dip™		Aremco-Seal™	Corr-Paint™		Aremco-Seal™			Glass-Coat™		
Color (cured)	Off-White	Light Gray	Black	Green	Translucent-White	White	Green	Clear	Clear	Clear	Light Gray	Black	Black
Maximum Temperature, °F (°C)	2400 (1316)	2600 (1427)	2600 (1427)	2600 (1427)	900 (482)	1100 (593)	1100 (593)	800 (427)	800 (427)	800 (427)	900 (482)	1400 (760)	1000 (538)
No. Components	1	1	1	1	1	1	1	1	1	1	1	1	1
Viscosity, cP <sup>1</sup>	60,000–80,000	5,000-15,000	5,000-15,000	20,000-30,000	50–100	400–900	500–750	50–250	1,200–1,600	12,000–14,000	40–80	900–1,200	200–400
Specific Gravity, g/cc	1.98	1.55	1.57	1.73	1.31	1.27	1.31	1.05	1.09	1.22	1.59	1.61	1.65
Dielectric Breakdown Strength, VDC/mil	160	135	110	142	> 750	310	285	> 335	> 430	> 375	1,000	1,000	45
Solids by Weight, %	75.9	55.3	55.5	62.3	55.8	44.2	48.5	68.0	74.9	80.0	74.0	79.0	62.2
Solids by Volume, %	55.0	32.3	32.6	42.0	43.3	46.1	39.5	60.9	69.0	75.3	55.5	53.6	37.8
WFT, mils (microns) <sup>2</sup>	1.82 (46.2)	3.10 (78.6)	3.07 (78.0)	2.38 (60.5)	2.31 (58.6)	2.17 (55.1)	2.53 (64.3)	1.64 (41.7)	1.45 (36.8)	1.33 (33.7)	1.80 (45.8)	1.87 (47.4)	2.64 (67.1)
DFT, mils (microns) <sup>3</sup>	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)
Theoretical Dry Film Coverage <sup>4</sup> @ 1 mil, ft <sup>2</sup> /gal (m <sup>2</sup> /liter)	882 (21.6)	518 (12.7)	523 (12.8)	674 (16.5)	695 (17.1)	740 (18.2)	634 (15.6)	976 (24.0)	1106 (27.2)	1208 (29.6)	890 (21.8)	860 (21.1)	607 (14.9)
Curing, Min Air Set, hrs <sup>5</sup>	2–4	1.0	1.0	1.0	1.0	1.0	1.0	0.5–1.0	0.5–1.0	0.5–1.0	0.25	0.25	0.5
Curing, Heat Cure, °F, hrs	200, 2–4 + 350, 1–2 + 500, 1	200, 2–4 + 350, 1–2	200, 2–4 + 350, 1–2	200, 2–4 + 350, 1–2	480, 0.75	480, 0.75	480, 0.75	200, 0.5–1 + 480, .75–1	200, 0.5–1 + 480, .75–1	200, 0.5–1 + 480, .75–1	200, 0.25 + 480, 0.25 + 1000, 0.20	200, 0.25 + 480, 0.25 + 1200, 0.20	200, 10 Min + 1000, 20 Min + 1300, 3 Min
Application Temperature, °F	50–90	50–90	50–90	50–90	50–120	50–120	50–120	50–90	50–90	50–90	50–120	50–120	50–90
Thinner	512-N-T	538-N-T	538-N-T	538-N-T	Butyl Cellosolve/ Water	Butyl Cellosolve/ Water	Butyl Cellosolve/ Water	MEK	MEK	MEK	Ethanol	PM Acetate	Water
Flash Point, °F/°C	NA	NA	NA	NA	> 212 (100)	> 212 (100)	> 212 (100)	77 (25)	82 (28)	86 (30)	96 (36)	115 (46)	NA
Volatiles, lbs/gal	0.00	0.00	0.00	0.00	0.87	0.98	0.98	2.80	2.28	2.00	3.50	3.90	0.00
Shelf Life, months	6	6	6	6	6	6	6	6	6	6	6	6	6
Storage Temperature, °F	55–85	55–85	55–86	55–86	55–85	55–85	55–85	40–90	40–90	40–90	40–90	40–90	40–90

### Reference Notes

<sup>1</sup> Viscosity is measured using a Brookfield LV Viscometer.

<sup>2</sup> Estimated Wet Film Thickness (WFT).

<sup>3</sup> Recommended Dry Film Thickness (DFT).

<sup>4</sup> Actual coverage will vary depending on material losses during mixing and application.

<sup>5</sup> Where a value is provided for "Min Air Set", it is recommended that the coating set at room temperature for, at minimum, the specified time prior to curing.

### Abbreviations

NA Not Applicable  
NR Not Required  
DFT Dry Film Thickness  
WFT Wet Film Thickness

### Surface Preparation Notes

All surfaces should be free of oil, grease, dirt, corrosives, oxides, paints or other foreign matter. No further preparation is required when coating ceramics, refractories or graphites. Quartz should be sandblasted whenever possible. Smooth metal surfaces should be sandblasted or etched using Aremco's Corr-Prep™ CPR2000.

