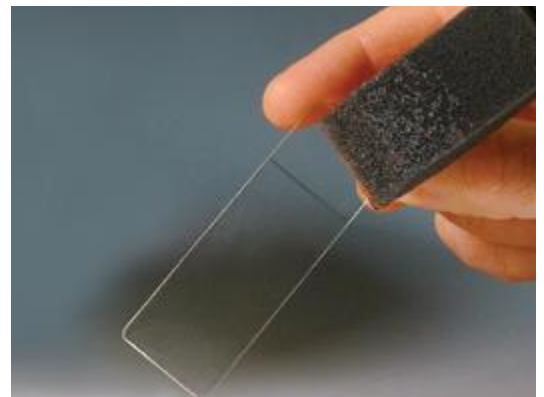




Cerama-Dip™ 538N coats resistors.



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™		Cerama-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 ¹	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) ²	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) ³	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 ⁴ @ 1 mil, ft ² /gal (m ² /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 ⁵	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 + 1300, 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
¹ Viscosity is measured using a Brookfield LV Viscometer.
² Estimated Wet Film Thickness (WFT).
³ Recommended Dry Film Thickness (DFT).
⁴ Actual coverage will vary depending on material losses during mixing and application.
⁵ 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.

Refer to Price List for complete order information.
 Aremco Products makes no warranty express or implied concerning the use of this product.
 The user assumes all risk of use or handling whether or not in accordance with directions or suggestions, or used singly or in combination with other products.

PRODUCT HIGHLIGHTS

Aremco's HiE-Coat™ 840-Series line of high emissivity coatings are black-body formulations designed to significantly improve the thermal efficiency of infrared heaters, furnaces, incinerators, and ovens used throughout the appliance, ceramics, chemical processing, metallurgical, and refining industries. Natural gas and oil savings in the range of 5–10% are typical using these coatings.

- 840-C** Ceramic-based, black-pigmented coating for ceramic fiber modules, light-weight refractory board, and dense refractories to 2000 °F (1093 °C).
- 840-CX** Ceramic-based, black-pigmented coating for ceramic fiber modules, light-weight refractory board, and dense refractories to 2400 °F (1316 °C).
- 840-CM** Ceramic-based, black-pigmented coating for dense refractories and refractory metals to 2000 °F (1093 °C).
- 840-M** Ceramic-based, black pigmented coating for carbon and stainless steel to 2000 °F (1093 °C).
- 840-MX** Ceramic-based, black pigmented coating for carbon and stainless steel to 2400 °F (1316 °C).
- 840-MS** Silicone-Ceramic, black pigmented coating for aluminum, copper, carbon and stainless steel to 1100 °F (593 °C).

High emissivity coatings absorb and re-radiate significantly more radiant and convective heat than an uncoated burner tube or refractory to a cooler load. For refractories lined systems, this reduces the amount of heat stored in the lining which results in less thermal shock and related thermal stresses, resulting in longer refractory life and reduced maintenance costs. Since less energy is absorbed by the refractory lining, faster heat-ups result, reducing cycle time and energy costs.



HiE-Coat™ 840-M coats gas-fired heating tubes.



HiE-Coat™ 840-C coats ceramic fiberboard infrared heater.



HiE-Coat™ 840-M coats industrial heat exchanger.



HiE-Coat™ 840-M coats gas burner component.



HiE-Coat™ 840-C coats exhaust pipe insulation.

HiE-COAT™ HIGH EMISSIVITY COATINGS

Product Number	840-C	840-CX ⁶	840-CM	840-M	840-MX ⁶	840-MS
Type	Inorganic-Ceramic					Silicone-Ceramic
Applications	Light-Weight Refractory	Light-Weight Refractory	Dense Refractory	Carbon Steel	Carbon Steel	Aluminum
	Fiber Modules	Fiber Modules	Refractory Metals	Stainless Steel	Stainless Steel	Copper
	Dense Refractory	Dense Refractory				Carbon & Stainless Steel
Color (cured)	Jet Black	Jet Black	Jet Black	Jet Black	Jet Black	Jet Black
Maximum Temperature, °F (°C)	2000 (1093)	2400 (1316)	2000 (1093)	2000 (1093)	2400 (1316)	1100 (593)
No. Components	1	1	1	1	1	1
Mix Ratio, by Weight (by Volume)	NA	NA	NA	NA	NA	NA
Viscosity, cP ¹	70–160	50–150	600–800	400–800	300–700	250–500
Specific Gravity, g/cc	1.60	1.52	1.54	1.61	1.57	1.49
Solids by Weight, %	58.5	51.5	48.0	47.3	47.3	57.1
Solids by Volume, %	27.3	20.25	19.9	22.1	22.1	42.5
WFT, mils (microns) ²	3.66 (92.9)	4.94 (125.4)	5.03 (127.7)	4.52 (114.8)	4.52 (114.8)	2.40 (61.0)
DFT, mils (microns) ³	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.0 (25.4)	1.0 (25.4)	1.00 (25.4)
Theoretical Dry Film Coverage ⁴ @ 1 mil, ft ² /gal (m ² /liter)	438 (10.8)	325 (8.0)	319 (7.8)	355 (8.7)	355 (8.7)	681 (16.7)
Curing, Min Air Set, hrs ⁵	1.0–2.0	1.0–2.0	1.0	1.0	1.0	1.0
Curing, Heat Cure, °F, hrs	200, 1	200, 1	200, 0.5 + 500 / 1	200, 1 + 500 / 1	200, 1 + 500 / 1	480 / .75
Application Temperature, °F	50–90	50–90	50–90	50–90	50–90	50–120
Thinner	840-C-T	840-CX-T	840-CM-T	840-M-T	840-MX-T	PM Acetate
Flash Point, °F/°C	NA	NA	NA	NA	NA	~118 (48)
Volatiles, lbs/gal	0.0	0.0	0.0	0.0	0.0	5.3
Shelf Life, months	6	6	6	6	6	6
Storage Temperature, °F	55–85	55–85	55–85	55–85	55–85	40–90

Reference Notes

- Viscosity is measured using a Brookfield LV Viscometer; spindle and speed selection vary depending on the product.
- Estimated Wet Film Thickness (WFT).
- Recommended Dry Film Thickness (DFT).
- Actual coverage will vary depending on material losses during mixing and application.
- Where a value is provided for "Min Air Set", it is recommended to set the coating at room temperature for, at minimum, the specified time prior to curing.
- Part numbers ending in "X" are made with black pigment that does not contain any copper; copper can produce "greening" of the coating when exposed to flame impingement.

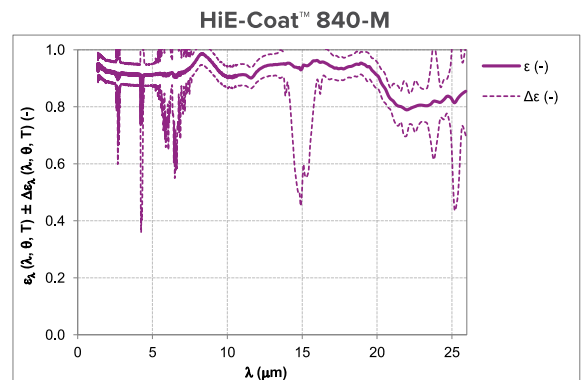
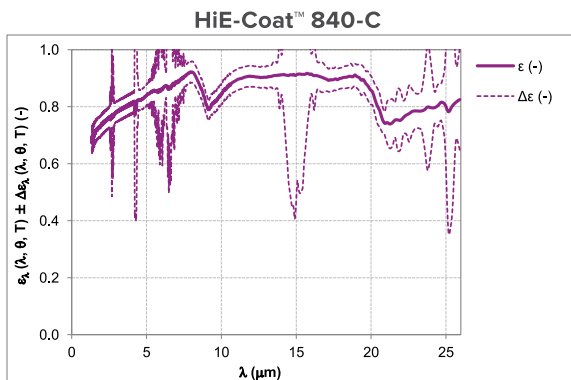
Surface Preparation Notes

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.

Abbreviations

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

Spectral Normal Emissivity at 800 °C



λ (μm)	2	3.5	4.7	8.3	10	12.5	17.5	20	25
ε _λ (λ, θ, T) (-)	0.735	0.799	0.827	0.903	0.848	0.904	0.896	0.860	0.809
Δε (-), k = 2	0.036	0.036	0.036	0.037	0.035	0.036	0.042	0.051	0.066

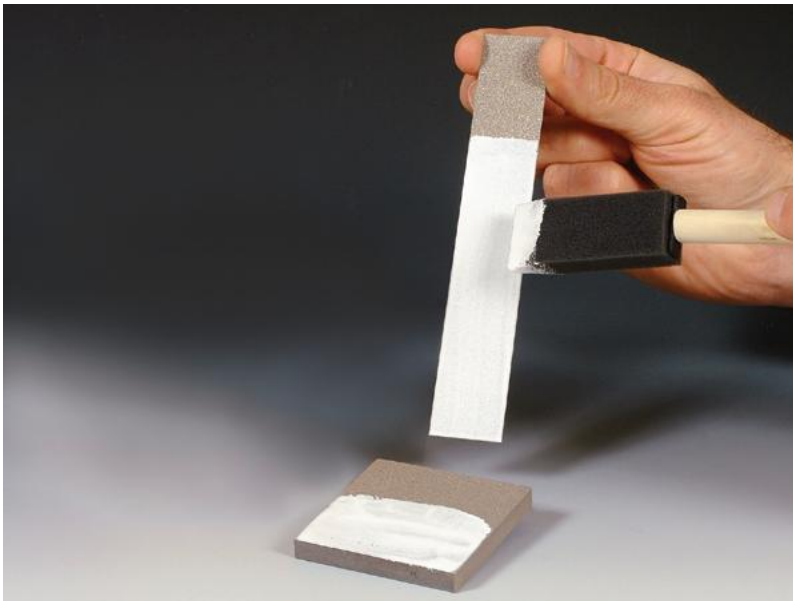
λ (μm)	2	3.5	4.7	8.3	10	12.5	17.5	20	25
ε _λ (λ, θ, T) (-)	0.924	0.915	0.911	0.986	0.906	0.943	0.934	0.913	0.832
Δε (-), k = 2	0.038	0.037	0.037	0.039	0.037	0.037	0.041	0.047	0.062

For more Spectral Normal Emissivity Charts, visit aremco.com/tech-notes

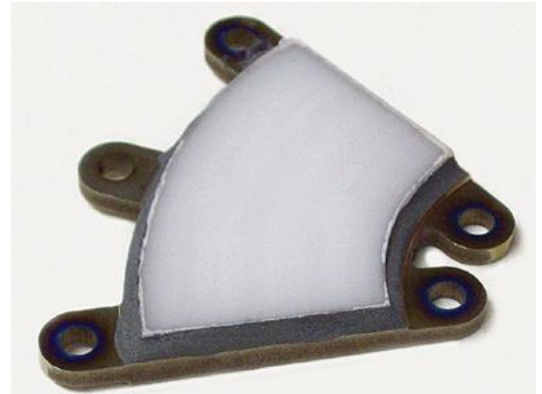
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The user assumes all risk of use or handling whether or not in accordance with directions or suggestions, or used singly or in combination with other products.



Ceramacoat™ 503-VFG-C-WHT applied to thermal spray substrate.



Ceramabind™ 542 seals thermal spray on sensor.



CP2000 seals thermal spray on small heater.

PRODUCT HIGHLIGHTS

- 542** Single part, low viscosity, water-dispersed, aluminum phosphate solution for penetrating ultra fine thermal spray applications to 3000 °F (1650 °C).
- 503-VFG-C** Single part, alumina-filled, phosphate-bonded, abrasion and corrosion resistant sealer for thermal spray applications to 3000 °F (1650 °C). Available in the following standard colors:
- | | |
|---------------|--------|
| 503-VFG-C-WHT | White |
| 503-VFG-C-BLK | Black |
| 503-VFG-C-BLU | Blue |
| 503-VFG-C-RED | Red |
| 503-VFG-C-ORG | Orange |
- CP2000** Single part, urethane-based, gloss black, low viscosity, room temperature curing, abrasion and corrosion resistant sealer for applications to 400 °F (204 °C).
- CP2070** Two part, novolac-epoxy with exceptional abrasion and corrosion resistance for continuous operations to 300 °F (150 °C) and intermittent use to 400 °F (204 °C).
- CP4010** Single part, silicone-based, low viscosity, heat-curable, aluminum-filled sealer offering exceptional moisture resistance to 1100 °F (593 °C).



CP2000 seals thermal spray on motor housing.

HIGH TEMPERATURE THERMAL SPRAY SEALANTS

Type	INORGANIC		URETHANE	NOVOLAC-EPOXY	SILICONE
Product Number	542	503-VFG-C	CP2000	CP2070	CP4010
Tradename	Ceramabind™	Ceramacoat™		Corr-Paint™	
Color (cured)	Clear	Assorted ⁶	Gloss Black	Gray	Aluminum
Maximum Temperature, °F (°C)	3000 (1650)	3000 (1650)	400 (204)	300 (150)	1100 (593)
No. Components	1	1	1	2	1
Mix Ratio, by Weight (by Volume)	NA	NA	NA	100:42 (2:1)	NA
Viscosity, cP¹	35–45	5,000–7,000	200–240	800–1000	200–600
Specific Gravity, g/cc	1.47	2.34	1.05	1.10	1.05
Solids by Weight, %	41.0	76.0	67.0	100.0	44.2
Solids by Volume, %	22.0	53.7	49.0	100.0	41.6
WFT, mils (microns)²	4.54 (115.3)	1.86 (47.3)	2.00 (50.5)	1.00 (25.4)	2.4 (61.0)
DFT, mils (microns)³	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.0 (25.4)
Theoretical Dry Film Coverage⁴ @ 1 mil, ft²/gal (m²/liter)	353 (8.7)	861 (21.1)	722 (17.7)	1604 (39.3)	611 (14.9)
Curing, Min Air Set, hrs⁵	1.0–2.0	1.0–2.0	0.5	8.0	1.0
Curing, Heat Cure, °F, hrs	200, 1 + 500, 1 + 700, 1	200, 1 + 500, 1 + 700, 1	RT, 24 or 250, 1	RT, 24	450, 1 or 480, 0.75
Application Temperature, °F	50–90	50–90	50–90	50–90	50–120
Thinner	Water	503-T, Water	Hi-Flash Naptha	Xylene	Distilled Water
Flash Point, °F/°C	NA	NA	140 (60)	> 200 (93)	> 212 (100)
Volatiles, lbs/gal	0.00	0.00	2.86	0.00	0.86
Shelf Life, months	6	6	12	12	6
Storage Temperature, °F	55–85	55–85	40–80	40–90	55–85

Reference Notes

- ¹ Viscosity is measure using a Brookfield LV Viscometer; spindle and speed selection vary depending on the product.
- ² Estimated Wet Film Thickness (WFT).
- ³ Recommended Dry Film Thickness (DFT).
- ⁴ Actual coverage will vary depending on material losses during mixing and application.
- ⁵ Where a value is provided for “Min Air Set”, it is recommended to set the coating at room temperature for, at minimum, the specified time prior to curing.

503-VFG-C

- ⁶ Available in the following standard colors:
- | | |
|---------------|--------|
| 503-VFG-C-WHT | White |
| 503-VFG-C-BLK | Black |
| 503-VFG-C-BLU | Blue |
| 503-VFG-C-RED | Red |
| 503-VFG-C-ORG | Orange |

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.

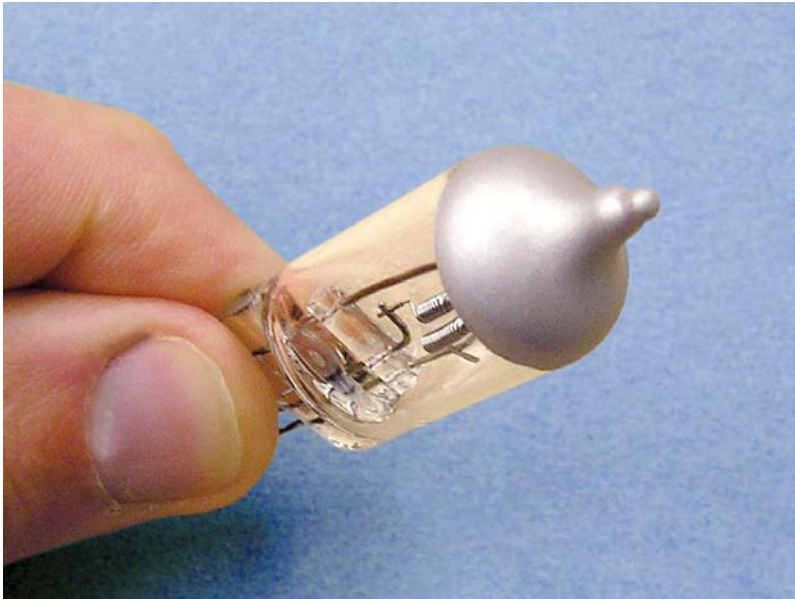
Abbreviations

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

Refer to Price List for complete order information.

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Lamp-Coat™ LC4010-GL applied to auto headlamp.



Lamp-Coat™ LC4040-SG applied to IR heater.



Ceramacoat™ 845-GLT applied to auto headlamp.

PRODUCT HIGHLIGHTS

Ceramic-Inorganic

845 Single part, waterborne, silicon-filled, phosphate-bonded, brown-black coating for glass and quartz to 2000 °F (1093 °C). Primarily used for marking ceramic parts and coating automotive headlamps, stadium lighting and quartz vessels for the semiconductor industry. Standard viscosity is 200–400 cP; a higher viscosity coating, 845-HV, in the range of 500–800 cP is available upon request. Additional colors below are offered.

845-BLK	Jet Black
845-BLU	Cobalt Blue
845-GRY	Light-Gray
845-GLT	Light-Green
845-GDK	Dark-Green
845-SIL	Silver
845-WHT	White

Glass

613	Glass-filled adhesive/sealer for use with porous ceramics and refractories to 1150 °F (620 °C).
617	Glass-filled adhesive/sealer for use with porous ceramics and refractories to 1500 °F (816 °C).
850	Glass-ceramic filled, white reflective coating for glass and quartz to 1500 °F (816 °C).

Silicone

LC4010-BT	Aluminum-filled coating for application over black top coated headlamps to 1020 °F (550 °C).
LC4010-GL	Aluminum-filled coating for application directly over uncoated headlamps to 1020 °F (550 °C).
LC4040-SG	White reflective coating for use on mercury vapor lamps and other high temperature glass and quartz components to 1200 °F (649 °C).



Quartz-Coat™ 850 applied to quartz IR heater tube.

HIGH TEMPERATURE COATINGS FOR CERAMICS, GLASS & QUARTZ

Type	INORGANIC-CERAMIC										GLASS			SILICONE		
	845	845-HV	845-BLK	845-BLU	845-GRY	845-GLT	845-GDK	845-SIL	845-WHT	613	617	850	LC4010-BT	LC4010-GL	LC4040-SG	
Tradename	Quartz-Coat™		JetBlack	Blue	Gray	Ceramacoat™		Matte Silver	Off-White	Aremco-Seal™		Quartz-Coat™	Silver	Silver	White	
Color (cured)	Brown-Black	Brown-Black	JetBlack	Blue	Gray	Light Green	Dark Green	Matte Silver	Off-White	Light Gray	Clear	White	Silver	Silver	White	
Maximum Temperature, °F (°C)	2000 (1093)	2000 (1093)	1500 (816)	1500 (816)	1500 (816)	1500 (816)	1500 (816)	1500 (816)	1500 (816)	1150 (620)	1500 (816)	1600 (871)	1020 (550)	1020 (550)	1200 (649)	
No. Components	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Viscosity, cP¹	200–400	500–800	1000–1,500	500–1,000	400–700	750–1,250	800–1,000	400–900	400–700	1,000–2,000	1,100–1,500	500–1,000	40–50	300–400	250–500	
Specific Gravity, g/cc	1.44	1.51	1.66	1.64	1.65	1.66	1.67	1.46	1.83	1.39	1.45	1.84	1.07	1.05	1.70	
Solids by Weight, %	50.1	52.8	52.9	50.9	51.8	52.9	52.9	44.4	41.3	54.0	51.3	61.3	57.0	35.8	70.9	
Solids by Volume, %	22.9	31.9	32.0	23.6	25.2	26.7	26.7	23.1	22.9	41.6	40.5	31.4	49.5	31.9	52.7	
WFT, mils (microns)²	3.24 (82.3)	3.13 (79.6)	2.90 (73.8)	4.24 (107.8)	3.97 (100.8)	3.74 (95.0)	3.74 (95.0)	4.34 (110.1)	4.12 (104.6)	2.40 (61.0)	2.47 (62.7)	3.18 (80.8)	2.02 (51.3)	3.13 (79.6)	1.90 (48.2)	
DFT, mils (microns)³	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)	1.00 (25.4)	1.00 (25.4)	
Theoretical Dry Film Coverage⁴ @ 1 mil, ft ² /gal (m ² /liter)	495 (12.2)	512 (12.6)	552 (13.6)	378 (9.3)	404 (9.9)	429 (10.5)	429 (10.5)	370 (9.1)	389 (9.6)	668 (16.4)	650 (15.9)	504 (12.4)	794 (19.5)	512 (12.6)	845 (20.8)	
Curing, Min Air Set, min⁵	10	10	10	10	10	10	10	10	10	30–60	30	30	10	5	60	
Curing, Heat Cure, °F, min⁶	200, 10 + 900, 5	200, 10 + 900, 5	200, 10 + 900, 5	200, 10 + 900, 5	200, 10 + 900, 5	200, 10 + 900, 5	200, 10 + 900, 5	200, 10 + 900, 5	200, 10 + 900, 5	1150, 30 + 900, 5	200, 30 + 350, 60 + 1830, 1	1650, 15	200, 15 + 900, 10	200, 30 + 900, 10	200, 60 + 450, 60 + 1300, 15	
Application Temperature, °F	50–90	50–90	50–90	50–90	50–90	50–90	50–90	50–90	50–90	50–90	50–90	50–90	50–120	50–120	50–120	
Thinner	845-T	845-T	845-T	845-T	845-T	845-T	845-T	845-T	845-T	Water	Water	Water	PM Acetate	Ethanol	PM Acetate	
Flash Point, °F/°C	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	~118 (48)	~118 (48)	~115 (46)	
Volatiles, lbs/gal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.7	6.1	3.8	
Shelf Life, months	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
Storage Temperature, °F	55–85	55–85	55–85	55–85	55–85	55–85	55–85	55–85	55–85	40–90	40–90	40–90	40–90	40–90	40–90	

Reference Notes

- ¹ Viscosity is measured using a Brookfield LV Viscometer; spindle and speed selection vary depending on the product.
- ² Estimated Wet Film Thickness (WFT).
- ³ Recommended Dry Film Thickness (DFT).
- ⁴ Actual coverage will vary depending on material losses during mixing and application.
- ⁵ 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.
- ⁶ Recommended ramp rate is 10 °F per minute.

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.

Refer to Price List for complete order information.

Aremco Products makes no warranty express or implied concerning the use of this product.

The user assumes all risk of use or handling whether or not in accordance with directions or suggestions, or used singly or in combination with other products.

Aremco's refractory coatings offer the ultimate protection of high temperature components used in the processing of ceramics, glass, metals, and plastics.

FEATURES

- Ultra Hi-Temp Resistance
- Non-Wetted by Molten Metals, Salts, Glass & Plastics
- High Lubricity for Easy Part Release
- Minimizes Cast Surface Defects
- Increases Mold & Die Life
- For Use in Oxidizing, Reducing & Vacuum Atmospheres

APPLICATIONS

- Composite Forming
- Glass Forming
- Metal Casting
- Injection Molding
- Ceramic Hot-Pressing
- Metal Powder Sintering
- Welding
- Brazing

PRODUCT HIGHLIGHTS

Graphi-Coat™ 623

This patented coating is a two-part, silica-bonded, titanium diboride filled, oxidation resistant coating for protecting graphite crucibles, electrodes, and heat-treating fixtures to 2000 °F (1093 °C).

Pyro-Paint™ 634-AL

This high purity alumina, two-part coating seals alumina fiberboards and shapes to fill porosity and resist molten metals to 3200 °F (1760 °C). Increases heat reflectivity to improve furnace efficiency by reducing ramp up times.

Pyro-Paint™ 634-ALP

This phosphate-bonded, single-part alumina coating bonds exceptionally well to dense refractories, providing high abrasion and corrosion resistance for operating temperatures to 3200 °F (1760 °C).

Pyro-Paint™ 634-AS and 634-AS1

These alumina-silica, single-part coatings increase the durability of refractory fiberboards by sealing the substrate to minimize dusting and resist wetting by non-ferrous metals to 2300 °F (1260 °C).

Pyro-Paint™ 634-BN and 634-BNSC

These lubricious, boron nitride, single-part coatings are used to seal refractory fiberboards and metals from wetting by non-ferrous metals, salts, glasses and plastics. Select 634-BN for hard-coat and 634-BNSC for a more consumable soft-coat.

Pyro-Paint™ 634-GR

This single-part graphite coating improves parting of aluminum permanent molds, non-sticking in glass forming, and lubrication and stop-off in metalworking and wire drawing. Provides superior release, surface finish and mold protection.

Pyro-Paint™ 634-SIC

This single-part, silicon carbide coating improves the oxidation resistance of graphite crucibles, electrodes, and heat-treating fixtures to 2550 °F (1400 °C).

Pyro-Paint™ 634-YO

This single-part, yttrium oxide coating protects graphite, ceramic and metals, exposed to reactive metals such as titanium, uranium and their alloys under inert or vacuum atmospheres to 2732 °F (1500 °C).

Pyro-Paint™ 634-ZO

This single-part, zirconium oxide coating produces a hard, oxidation resistant coating on carbon and stainless steel and a range of refractory metals including molybdenum, platinum, rhodium, and titanium to 3270 °F (1800 °C). Good for sealing porous refractories and protecting resistance heating elements from oxidation and residue buildup that causes arcing and reduced element life.



HIGH TEMPERATURE REFRACTORY COATINGS PROPERTIES

Part Number	623	634-AL	634-ALP	634-AS	634-AS-1	634-BN	634-BNSC	634-GR	634-SIC	634-YO	634-ZO
Principal Application	Reduce Oxidation of Graphite	Seal Alumina Fiberboard	Seal Dense Refractory	Seal Refractory Fiberboard	Resist Wetting of Non-Ferrous Alloys on Refractories	Boron Nitride	Resist Wetting of Glass, Metal	Reduce Oxidation of Graphite	Resist Reactive Metals	Prevent Oxidation of Metals	
Major Constituent	Titanium Diboride	Aluminum Oxide	Alumina-Silica	Alumina-Silica	Boron Nitride	White	Graphite	Silicon Carbide	Yttrium Oxide	Zirconium Oxide	
Color	Gray	White	White	Off-White	White	White	Black	Gray	Off-White	Off-White	
Temperature Limit, °F (°C)	2000 (1093)	3200 (1760)	3200 (1760)	2300 (1260)	2300 (1260)	1560 (850) ¹	2200 (1200)	2550 (1400)	2732 (1500)	3270 (1800)	
No. Components	2	1	1	1	1	1	1	1	1	1	
Mix Ratio²	60:40	75:25	NA	NA	NA	NA	NA	NA	NA	NA	
Viscosity, cP	200–400	100–200	5,000–7,000	500–800	10,000–20,000	500–1,500	100–250	750–2,000	200–400	1,000–2,000	
Specific Gravity, g/cc	2.15	2.46	2.38	1.55	1.60	1.15	1.24	2.00	1.55	2.02	
Solids by Weight, %	78.7	81.3	76.0	64.3	64.9	19.8	47.5	68.2	45.0	59.2	
Solids by Volume, %	52.7	56.1	53.7	41.1	40.7	18.0	31.6	42.0	14.0	29.6	
WFT, mils (microns)⁶	1.9 (48.2)	1.8 (45.3)	1.9 (47.3)	2.4 (61.7)	2.5 (62.4)	5.6 (141.5)	3.2 (80.5)	2.4 (60.5)	7.1 (180.9)	3.4 (86.0)	
DFT, mils (microns)⁷	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	
Theoretical Dry Film Coverage @ 1 mil, ft ² /gal (m ² /liter)	845 (20.7)	899 (22.1)	861 (21.1)	660 (16.2)	653 (16.0)	288 (7.1)	506 (12.4)	674 (16.5)	225 (5.5)	474 (11.6)	
Recommended Curing											
Min Air Set, hrs	1	2	1	2	2	2	2	1	0.5	2	
Hours Cure °F/hrs ³	1400/0.25	200/2	200/2, 800/1	200/2	200/2	200/2	200/2	200/2, 800/1	200/1	200/2	
Application Temperature, °F	50–90	50–90	50–90	50–90	50–90	50–90	50–90	50–90	50–90	50–90	
Thinner⁴	623-T	634-AL-T	634-ALP-T	634-AS-T	634-AS-T	634-BN-T	634-GR-T	634-SIC-T	H ₂ O	634-ZO-T	
Coating pH	8–9.5	4–5	2–3	8–9.5	8–9.5	11–12	8–9	2–3	7–8	11–12	
Flash Point, °F	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Weight/Gallon, lbs⁵	12.5	12.0	16.5	12.0	12.5	9.5	10.0	16.5	12.0	14.5	
Shelf Life, months	6	6	6	6	6	6	6	6	6	6	
Storage Temperature, °F	40–90	40–90	40–90	40–90	40–90	40–90	40–90	40–90	40–90	40–90	

Reference Notes

- ¹ Temperature limit applies to oxidizing atmospheres only. Can be used in vacuum/inert atmospheres to 2000 °C.
- ² Mix ratio is Powder : Liquid. Ratios may be altered as required to adjust viscosity.
- ³ A short cure is recommended; however, most of these products can be air set then ramped up to operating temperature immediately.
- ⁴ Distilled water may also be used to thin all products. Use 1–2% distilled water by weight.
- ⁵ For two-part systems, this only refers to the weight per gallon for the powder portion of the mixture.
- ⁶ Estimated Wet Film Thickness (WFT).
- ⁷ Recommended Dry Film Thickness (DFT).

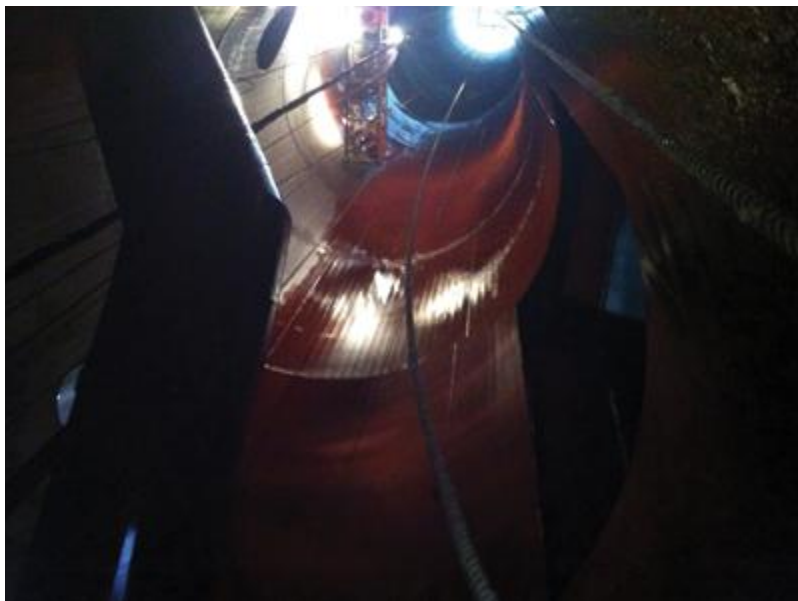
Abbreviations

NA Not Applicable

Refer to Price List for complete order information.

Aremco Products makes no warranty express or implied concerning the use of this product.

The user assumes all risk of use or handling whether or not in accordance with directions or suggestions, or used singly or in combination with other products.



Corr-Paint™ CP2050-LF coats flare stack.



Corr-Paint™ CP2060



Corr-Paint™ CP2060 coats pump housing.

Aremco's Corr-Paint™ epoxy and urethane-based coatings are used for producing corrosion and wear resistant barriers to 500 °F. Typical applications include tanks, pipelines, boilers, precipitators, scrubbers, bag houses, cyclones, hoppers and other process equipment used in the power, pulp and paper, and chemical processing industries.

PRODUCT HIGHLIGHTS

Urethane

CP2000	Jet Black
CP2010	Aluminum
CP2020	Gray

Epoxy-Phenolics

CP2050-FF	Fine-Fiber Reinforced
CP2050-LF	Large-Fiber Reinforced
CP2050-NF	Unfilled

Novolac-Epoxy

CP2060	SiC Filled, Hi-Build, 500 °F
CP2070	Gray, Low Viscosity, 300 °F
CP2075	Gray, Hi-Build, 400 °F

FEATURES

- Single-Part, No Mixing
- Low Viscosity
- Cures at Room Temperature
- High Wear Resistance
- Excellent Salt Spray Resistance
- Maximum Temperature, 400 °F
- Two-Part Systems
- High Viscosity for Thick Depositions
- Cures at Room Temperature
- Excellent Corrosion Resistance
- Excellent Wear Resistance
- Maximum Use Temperature, 500 °F
- Two-Part Systems
- Cures at Room Temperature
- Excellent Corrosion Resistance
- Excellent Wear Resistance



Corr-Paint™ CP2000 coats motor housing.

CORROSION PROTECTIVE URETHANE & EPOXY COATINGS PROPERTIES

Type	URETHANE			EPOXY-PHENOLIC		NOVOLAC-EPOXY	
	CP2000	CP2010	CP2020	CP2050-XX ¹	CP2060 ¹	CP2070	CP2075
Product Number							
Color (cured)	Gloss Black	Aluminum	Gloss Gray	Brown-Red	Gray	Gray	Gray
Temp. Continuous, °F(°C)	400 (204)	400 (204) ²	400 (204) ²	400 (204)	500 (260)	300 (150) ⁷	400 (204)
No. Components	1	1	1	2	2	2	2
Mix Ratio, by Weight	NA	NA	NA	1:1	100:8	100:42 (2:1 Vol)	100:26 (3:1 Vol)
Viscosity, cP	200–240	300–600	200–500	Paste	Paste	800–1000	Paste
Specific Gravity, g/cc	1.05	1.08	1.08	1.60	1.90	1.10	1.10
Solids by Weight, %	67.0	70.0	72.0	100.0	100.0	100.0	100.0
Solids by Volume, %	49.0	66.0	77.0	100.0	100.0	100.0	100.0
WFT, mils (microns)³	4.0 (101.6)	4.0 (101.6)	4.0 (101.6)	50+ (1270.0)	50+ (1270.0)	7.0 (177.8)	20.0 (508.0)
DFT, mils (microns)⁴	2.0 (50.8)	2.6 (67.1)	3.1 (78.7)	50+ (1270.0)	50+ (1270.0)	7.0 (177.8)	20.0 (508.0)
Theoretical Dry Film Coverage⁵ @ 1 mil, ft²/gal (m²/liter)	722 (17.7)	1058 (25.9)	1235 (30.3)	1604 (39.3)	1604 (39.3)	1604 (39.3)	1604 (39.3)
Primer	NR	NR	NR	NR	NR	NR	NR
Touch, hrs	4–6	4–6	4–6	6–8	4	5	5
Handling, hrs	6–8	6–8	6–8	12–14	6–8	8	8
Recoat, (min/max), hrs	3/7	6/12	3/7	4/48	4/8	4/8	4/8
Min Air Set, hrs⁶	0.5	1	0.5	2	8	8	8
Cure, °F/hrs	RT/24 or 250/1	RT/24 or 250/1	RT/24 or 250/1	RT/48 or 175/4	RT/48 or 250/6	RT/24	RT/24 or 175/4
Application Temp., °F	50–90	50–90	50–90	50–90	50–90	50–90	50–90
Thinner	Hi-Flash Naptha	Hi-Flash Naptha	Hi-Flash Naptha	NR	NR	Xylene	Xylene
Pot Life, hrs at room temp.	NA	NA	NA	0.70	0.75 (500g)	0.35 (200g)	0.5 (200g)
Flash Point, °F (°C)	140 (60)	140 (60)	140 (60)	> 200 (93)	> 200 (93)	> 200 (93)	> 200 (93)
VOC's, lbs/gal	2.86	3.00	2.80	0.00	0.00	0.00	0.00
Shelf Life @RT, months	12	12	12	12	12	12	12
Storage Temperature, °F	40–90	40–90	40–90	40–90	40–90	40–90	40–90

Reference Notes

Technical Notes for Epoxy Coatings	CP2050-XX	CP2060	CP2070	CP2075
Lap Shear Strength to Aluminum, psi	2,700	2,300	2,050	2,260
25 °C	—	—	1,900	2,100
65 °C	1,800	2,000	1,250	1,420
100 °C	900	1,200	225	430
175 °C	300	900	—	—
Flexural Strength, psi	13,400	11,500	12,000	12,000
Compressive Strength, psi	10,300	12,000	8,500	8,500
Elongation, %	3	<2	<2	<2
Hardness, Shore D	86	90	85	85

- ² CP2010 will begin to discolor at 300 °F. ⁶ Where a value is provided for "Min Air Set", it is recommended that the coating set at room temp.
- ³ Estimated Wet Film Thickness (WFT). ⁷ for, at minimum, the specified time prior to curing.
- ⁴ Recommended Dry Film Thickness (DFT). ⁸ Withstands intermittent service temperatures of
- ⁵ Actual coverage will vary depending on material losses during mixing and application. 350–400 °F if cured for 2 hours at 185 °F.

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. Smooth metal surfaces should be abrasive blasted to an SSPC-SP10 near white blast. Remove abrasive residue using air pressure; do not clean with organic solvents

Aremco's Corr-Prep™ CPR2000 is recommended as an alternative when sandblasting is not possible. This is a specially formulated, water-based, zinc phosphate metal etching solution that is non-toxic, non-flammable, non-caustic, and non-corrosive. It etches metal to provide surface profile for superior coating adhesion to aluminum, galvanized metal, steel, and stainless steel. It also helps to improve long-term corrosion protection. Application is simple—just brush or spray liquid on the substrate, allow to sit for 20–30 minutes, then rinse off and dry substrate thoroughly prior to coating.

CHEMICAL RESISTANCE CHART

Chemical	%	CP2000	CP2050	CP2060	CP2070	CP2075
ACIDS						
Acetic Acid	20%	B	B	B	B	B
Acetic Acid	80%	B	B	B	B	B
Hydrochloric Acid	10%	A	A	A	A	A
Hydrochloric Acid	20%	A	A	A	A	A
Nitric Acid	10%	A	A	A	A	A
Nitric Acid	20%	B	B	B	B	B
Nitric Acid	50%	D	D	D	D	C
Nitric Acid	100%	D	D	D	D	B
Phosphoric Acid	< 40%	B	A	A	A	A
Phosphoric Acid	40–100%	D	C	C	C	C
Sulfuric Acid	10%	A	A	A	A	A
Sulfuric Acid	10–75%	C	B	B	B	B
Sulfuric Acid	75–100%	D	D	D	D	C
BASES						
Potassium Hydroxide		A	A	A	A	A
Sodium Hydroxide	20%	A	A	A	A	A
Sodium Hydroxide	50%	A	A	A	A	A
Sodium Hydroxide	80%	A	A	A	A	A
FUELS & SOLVENTS						
Acetone		B	B	B	B	B
Alcohol		A	A	A	A	A
Crude Oil		A	A	A	A	A
Diesel		A	A	A	A	A
Gasoline		A	A	A	A	A
Heptane		A	A	A	A	A
Jet Fuel		A	A	A	A	A
Kerosene		A	A	A	A	A
Methyl Ethyl Ketone		B	B	B	B	B
Methylene Chloride		B	B	B	B	A
Toluene		A	A	A	A	A
Xylene		A	A	A	A	A

Abbreviations

NA Not Applicable
 NR Not Required
 DFT Dry Film Thickness
 WFT Wet Film Thickness
 RT Room Temperature

Key

A No Effect or Excellent
 B Minor Effect or Good
 C Moderate Effect or Fair
 D Severe Effect or Not Recommended

Refer to Price List for complete order information.

Aremco Products makes no warranty express or implied concerning the use of this product. The user assumes all risk of use or handling whether or not in accordance with directions or suggestions, or used singly or in combination with other products.



Corr-Paint™ CP4000-S



Corr-Paint™ CP4040-S



Corr-Paint™ CP4040-S

Aremco's Corr-Paint™ CP40xx-S series coatings are formulated using an advanced silicone-polyester resin combined with inorganic fillers and pigments to offer continuous temperature resistance to 600 °F (316 °C) and intermittent resistance to 800 °F (427 °C).

These coatings are single-part, heat curable systems that adhere to a wide range of materials including metals, ceramics, glass, quartz, and refractories, and offer outstanding resistance to outdoor weathering, UV light, salt spray corrosion, oxidation, detergents, and thermal shock.

PRODUCT HIGHLIGHTS

- Single-Part, No Mixing
- Low Viscosity
- Maximum Use Temperature, 600 °F (316 °C)
- Intermittent Use Temperature, 800 °F (427 °C)
- Bonds to Ceramics, Glass, Quartz, Metals
- Excellent Resistance to Moisture & Salt Spray
- Resists Thermal Shock
- Resists Ultraviolet Light

AVAILABLE COLORS*



* All colors are matte finish. The colors represented here are approximate and the actual product color may vary.

TYPICAL APPLICATIONS

- | | |
|-------------------|---------------------|
| • Bag Houses | • Furnaces |
| • Boiler Casings | • Ovens |
| • Chimneys | • Kilns |
| • Cyclones | • Lighting Fixtures |
| • Ducting | • Process Vessels |
| • Heaters | • Reformers |
| • Heat Exchangers | • Scrubbers |
| • Exhaust Systems | • Stacks |
| • Engines | • Turbochargers |

HIGH TEMPERATURE SILICONE-POLYESTER COATINGS PROPERTIES

Type	SILICONE-POLYESTER									
	CP4000-S	CP4010-S	CP4020-S	CP4040-S	CP4050-S	CP4060-S	CP4070-S	CP4080-S	CP4090-S	CP4095-S
Color (cured)	Black	Aluminum	Gray	White	Green	Red	Blue	Yellow	Brown	Orange
Temperature Continuous, °F (°C)	600 (316)	600 (316)	600 (316)	600 (316)	600 (316)	600 (316)	600 (316)	600 (316)	600 (316)	600 (316)
Temperature Intermittent, °F (°C)	800 (427)	800 (427)	800 (427)	800 (427)	800 (427)	800 (427)	800 (427)	800 (427)	800 (427)	800 (427)
No. Components	1	1	1	1	1	1	1	1	1	1
Viscosity, cP¹	400–600	300–400	200–400	300–500	250–350	500–700	150–250	300–500	400–600	550–750
Specific Gravity, g/cc	1.45	1.00	1.42	1.37	1.46	1.47	1.43	1.40	1.45	1.40
Solids by Weight, %	69.9	37.0	62.1	42.1	62.1	62.1	62.1	62.1	62.1	62.1
Solids by Volume, %	57.7	36.7	58.5	49.2	57.4	57.4	59.0	57.7	58.6	58.9
WFT, mils (microns)²	1.73 (44.0)	2.73 (69.2)	1.71 (43.4)	2.03 (51.6)	1.74 (44.3)	1.74 (44.3)	1.69 (43.0)	1.73 (44.0)	1.71 (43.3)	1.70 (43.2)
DFT, mils (microns)³	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)
Theoretical Dry Film Coverage⁴ @ 1 mil, ft²/gal (m²/liter)	925 (22.7)	589 (14.5)	938.0 (23.0)	789.7 (19.4)	920.3 (22.6)	921.1 (22.6)	946.7 (23.2)	925.6 (22.7)	940 (23.1)	944 (23.2)
Primer⁵	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Touch, hrs	1–2	1–2	1–2	1–2	1–2	1–2	1–2	1–2	1–2	1–2
Handling, hrs	2–4	2–4	2–4	2–4	2–4	2–4	2–4	2–4	2–4	2–4
Recoat, (min/max), hrs	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24
Min Air Set, hrs⁶	1	1	1	1	1	1	1	1	1	1
Cure, °F/hrs^{7,8}	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75
Application Temperature, °F	50–120	50–120	50–120	50–120	50–120	50–120	50–120	50–120	50–120	50–120
Thinner	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate
Pot Life, hrs at room temp.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flash Point, °F (°C)	118 (48)	115 (46)	115 (46)	115 (46)	115 (46)	115 (46)	115 (46)	115 (46)	115 (46)	115 (46)
VOC's, lbs/gal	3.6	5.3	3.6	3.4	3.7	3.7	3.6	3.7	3.6	3.6
Shelf Life @RT, months	6	6	6	6	6	6	6	6	6	6
Storage Temperature, °F	40–90	40–90	40–90	40–90	40–90	40–90	40–90	40–90	40–90	40–90

Reference Notes

- Viscosity is measured using a Brookfield LV temperature for, at minimum, the specified time prior to curing.
- Estimated Wet Film Thickness (WFT).
- Recommended Dry Film Thickness (DFT).
- Actual coverage will vary depending on material losses during mixing and application.
- Primer is only recommended for exterior applications in which salt fog or moisture are present.
- Where a value is provided for "Min Air Set," it is recommended to set the coating at room

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. Smooth metal surfaces should be abrasive blasted to an SSPC-SP6 near white blast. Remove abrasive residue using air pressure; do not clean with organic solvents.

Aremco's Corr-Prep™ CPR2000 is recommended as an alternative when sandblasting is not possible. This is a specially formulated, water-based, zinc phosphate metal etching solution that is non-toxic, non-flammable, non-caustic, and non-corrosive. It etches metal to provide surface profile for superior coating adhesion to aluminum, galvanized metal, steel, and stainless steel. It also helps to improve long-term corrosion protection. Application is simple — just brush or spray liquid on the substrate, allow to sit for 20–30 minutes, then rinse off and dry substrate thoroughly prior to coating.

Application Notes: Mix thoroughly before use to redisperse fillers and pigments. Apply using a brush, roller or spray gun. When spraying, a maximum dry film thickness of 2 mils (0.002") can be achieved by applying two coats. Recommended fluid nozzle diameter is 40–50 mils, atomizing pressure of 40–50 psi, and distance from work of 8–10". Adequate ventilation is required when applying and curing the coating. Read Safety Data Sheet for further safety instructions.

Abbreviations

- NA Not Applicable
- NR Not Required
- DFT Dry Film Thickness
- WFT Wet Film Thickness
- RT Room Temperature

Refer to Price List for complete order information.

Aremco Products makes no warranty express or implied concerning the use of this product.

The user assumes all risk of use or handling whether or not in accordance with directions or suggestions, or used singly or in combination with other products.



Corr-Paint™ CP4020-S1



Corr-Paint™ CP4000-S1

Aremco's Corr-Paint CP40xx-S1 series coatings are formulated using an advanced solvent-based silicone resin combined with inorganic fillers and pigments to offer temperature resistance up to 1400 °F (760 °C).

These coatings are single-part, heat curable systems that adhere to a wide range of materials including metals, ceramics, glass, quartz, and refractories, and offer outstanding resistance to outdoor weathering, UV light, salt spray corrosion, oxidation, some chemicals, and thermal shock.

PRODUCT HIGHLIGHTS

- Single-Part, No Mixing
- Low Viscosity
- Maximum Use Temperature, 1100–1400 °F (593–760 °C)
- Good Chemical Resistance
- Bonds to Ceramics, Glass, Quartz, Metals
- Excellent Resistance to Moisture & Salt Spray
- Resists Thermal Shock
- Resists Ultraviolet Light
- Solvent-Based

AVAILABLE COLORS*

 CP4000-S1 Black	 CP4060-S1 Red
 CP4000-S1-HT Black	 CP4070-S1 Blue
 CP4010-S1 Aluminum	 CP4080-S1 Yellow
 CP4020-S1 Gray	 CP4090-S1 Brown
 CP4040-S1 White	 CP4095-S1 Orange
 CP4050-S1 Green	

* All colors are matte finish. The colors represented here are approximate and the actual product color may vary.

TYPICAL APPLICATIONS

- | | |
|-------------------|---------------------|
| • Bag Houses | • Furnaces |
| • Boiler Casings | • Ovens |
| • Chimneys | • Kilns |
| • Cyclones | • Lighting Fixtures |
| • Ducting | • Process Vessels |
| • Heaters | • Reformers |
| • Heat Exchangers | • Scrubbers |
| • Exhaust Systems | • Stacks |
| • Engines | • Turbochargers |

HIGH TEMPERATURE SOLVENT-BASED SILICONE COATINGS PROPERTIES

Type	SILICONE										
	CP4000-SI	CP4000-SI-HT	CP4010-SI	CP4020-SI	CP4040-SI	CP4050-SI	CP4060-SI	CP4070-SI	CP4080-SI	CP4090-SI	CP4095-SI
Color (cured)	Black	Black	Aluminum	Gray	White	Green	Red	Blue	Yellow	Brown	Orange
Temperature Continuous, °F (°C)	1100 (593)	1400 (760)	1100 (593)	1100 (593)	1100 (593)	1100 (593)	1100 (593)	1100 (593)	1100 (593)	1100 (593)	1100 (593)
No. Components	1	1	1	1	1	1	1	1	1	1	1
Viscosity, cP¹	250–500	900–1200	250–500	150–250	250–500	300–500	600–800	350–500	300–500	300–500	500–700
Specific Gravity, g/cc	1.49	1.61	1.00	1.35	1.34	1.36	1.34	1.35	1.36	1.38	1.37
Solids by Weight, %	57.1	79.0	41.0	57.1	57.1	57.1	57.4	56.6	56.6	56.6	56.6
Solids by Volume, %	42.5	53.6	42.4	44.4	44.4	44.3	45.1	44.3	43.4	43.2	43.4
WFT, mils (microns)²	2.4 (59.8)	1.9 (47.4)	2.4 (59.9)	2.3 (57.3)	2.3 (57.2)	2.3 (57.4)	2.2 (56.4)	2.3 (57.3)	2.3 (58.6)	2.3 (58.6)	2.3 (58.6)
DFT, mils (microns)³	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)
Theoretical Dry Film Coverage⁴ @ 1 mil, ft²/gal (m²/liter)	681 (16.7)	860 (21.1)	680 (16.7)	711 (17.5)	712 (17.5)	710 (17.4)	723 (17.7)	711 (17.4)	696 (17.1)	694 (17.0)	697 (17.1)
Primer⁵	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Touch, hrs	1–2	1–2	1–2	1–2	1–2	1–2	1–2	1–2	1–2	1–2	1–2
Handling, hrs	2–4	2–4	2–4	2–4	2–4	2–4	2–4	2–4	2–4	2–4	2–4
Recoat, (min/max), hrs	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24
Min Air Set, hrs⁶	1	1	1	1	1	1	1	1	1	1	1
Cure, °F/hrs^{7,8}	480 / 75	200 / 25 480 / 25 1200 / 25	480 / 75	480 / 75	480 / 75	480 / 75	480 / 75	480 / 75	480 / 75	480 / 75	480 / 75
Application Temperature, °F	50–120	50–120	50–120	50–120	50–120	50–120	50–120	50–120	50–120	50–120	50–120
Thinner	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate	PM Acetate
Pot Life, hrs at room temp.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Flash Point, °F (°C)	~118 (48)	~118 (48)	~108 (42)	~118 (48)	~118 (48)	~118 (48)	~118 (48)	~118 (48)	~118 (48)	~118 (48)	~118 (48)
VOC's, lbs/gal	5.3	3.9	5.7	4.8	4.8	4.9	4.8	4.9	4.9	5.0	5.0
Shelf Life @RT, months	6	6	6	6	6	6	6	6	6	6	6
Storage Temperature, °F	40–90	40–90	40–90	40–90	40–90	40–90	40–90	40–90	40–90	40–90	40–90

Reference Notes

- Viscosity is measured using a Brookfield LV temperature for, at minimum, the specified time prior to curing.
- Viscometer, LV3 Spindle @ 30 RPM.
- Estimated Wet Film Thickness (WFT).
- Recommended Dry Film Thickness (DFT).
- Actual coverage will vary depending on material losses during mixing and application.
- Primer is only recommended for exterior applications in which salt fog or moisture are present.
- Where a value is provided for "Min Air Set", it is recommended to set the coating at room

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. Smooth metal surfaces should be abrasive blasted to an SSPC-SP6 near white blast. Remove abrasive residue using air pressure; do not clean with organic solvents.

Aremco's Corr-Prep™ CPR2000 is recommended as an alternative when sandblasting is not possible. This is a specially formulated, water-based, zinc phosphate metal etching solution that is non-toxic, non-flammable, non-caustic, and non-corrosive. It etches metal to provide surface profile for superior coating adhesion to aluminum, galvanized metal, steel, and stainless steel. It also helps to improve long-term corrosion protection. Application is simple — just brush or spray liquid on the substrate, allow to sit for 20–30 minutes, then rinse off and dry substrate thoroughly prior to coating.

Application Notes: Mix thoroughly before use to redisperse fillers and pigments. Apply using a brush, roller or spray gun. When spraying, a maximum dry film thickness of 2 mils (0.002") can be achieved by applying two coats. Recommended fluid nozzle diameter is 40–50 mils, atomizing pressure of 40–50 psi, and distance from work of 8–10". Adequate ventilation is required when applying and curing the coating. Read Safety Data Sheet for further safety instructions.

Abbreviations

NA	Not Applicable	DFT	Dry Film Thickness
NR	Not Required or Recommended	WFT	Wet Film Thickness
		RT	Room Temperature

Refer to Price List for complete order information.

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The user assumes all risk of use or handling whether or not in accordance with directions or suggestions, or used singly or in combination with other products.



Corr-Paint™ CP4020



Corr-Paint™ CP4090



Corr-Paint™ CP4060



Corr-Paint™ CP4070

Aremco's Corr-Paint™ CP40xx series coatings are formulated using an advanced water-based silicone emulsion combined with inorganic fillers and pigments to offer VOC compliant coatings with continuous temperature resistance to 1100 °F (593 °C) and intermittent resistance to 1200 °F (649 °C).

These coatings are single-part, heat curable systems that adhere to a wide range of materials including metals, ceramics, glass, quartz, and refractories, and offer outstanding resistance to outdoor weathering, UV light, salt spray corrosion, oxidation, some chemicals, and thermal shock.

PRODUCT HIGHLIGHTS

- Single-Part, No Mixing
- Low Viscosity
- Maximum Use Temperature, 1100 °F (593 °C)
- Intermittent Use Temperature, 1200 °F (649 °C)
- Bonds to Ceramics, Glass, Quartz, Metals
- Excellent Resistance to Moisture & Salt Spray
- Resists Thermal Shock
- Resists Ultraviolet Light
- Good Chemical Resistance
- Water-Based
- Low Volatile Organic Compounds (VOCs)

AVAILABLE COLORS*



* All colors are matte finish. The colors represented here are approximate and the actual product color may vary.

TYPICAL APPLICATIONS

- | | |
|----------------------|---------------------|
| • Bag Houses | • Engines |
| • Boiler Casings | • Furnaces |
| • Ceramic Cloth | • Ovens |
| • Ceramic Fiberboard | • Kilns |
| • Chimneys | • Lighting Fixtures |
| • Cyclones | • Process Vessels |
| • Ducting | • Reformers |
| • Heaters | • Scrubbers |
| • Heat Exchangers | • Stacks |
| • Exhaust Systems | • Turbochargers |

HIGH TEMPERATURE WATER-BASED SILICONE COATINGS PROPERTIES

Type	SILICONE									
Product Number	CP4000	CP4010	CP4020	CP4040	CP4050	CP4060	CP4070	CP4080	CP4090	CP4095
Color (cured)	Flat Black 1100(593)	Aluminum 1100(593)	Gray 1100(593)	White 1100(593)	Green 1100(593)	Red 1100(593)	Blue 1100(593)	Yellow 1100(593)	Brown 1100(593)	Orange 1100(593)
Temperature Continuous, °F (°C)	1 400-800	1 200-600	1 400-800	1 400-900	1 500-750	1 750-950	1 300-600	1 500-700	1 300-500	1 500-700
No. Components	1	1	1	1	1	1	1	1	1	1
Viscosity, cP¹	1.32	1.05	1.28	1.27	1.31	1.31	1.25	1.33	1.32	1.32
Specific Gravity, g/cc	51.5	44.2	44.2	44.2	48.5	46.5	44.8	47.0	44.5	44.5
Solids by Weight, %	38.1	41.6	38.2	46.1	39.5	38.3	38.5	38.0	37.8	37.8
Solids by Volume, %	2.6 (66.5)	2.4 (61.0)	2.6 (66.4)	2.2 (55.1)	2.5 (64.3)	2.6 (66.3)	2.6 (66.3)	2.6 (66.8)	2.7 (67.2)	2.6 (64.9)
WFT, mils (microns)²	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)	1.0 (25.4)
DFT, mils (microns)³	611 (14.9)	668 (16.4)	613 (15.1)	740 (18.2)	634 (15.6)	614 (15.1)	617 (15.2)	610 (15.0)	606 (14.9)	628 (15.4)
Theoretical Dry Film Coverage⁴ @ 1 mil, ft²/gal (m²/liter)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Primer⁵	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2	1-2
Touch, hrs	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4	2-4
Handling, hrs	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24	1/24
Recoat, (min/max), hrs	1	1	1	1	1	1	1	1	1	1
Min Air Set, hrs⁶	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75	450 / 1 or 480 / .75
Cure, °F/hrs^{7,8}	50-120	50-120	50-120	50-120	50-120	50-120	50-120	50-120	50-120	50-120
Application Temperature, °F	Distilled Water	Distilled Water	Distilled Water	Distilled Water	Distilled Water	Distilled Water	Distilled Water	Distilled Water	Distilled Water	Distilled Water
Thinner	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pot Life, hrs at room temp.	> 212 (100)	> 212 (100)	> 212 (100)	> 212 (100)	> 212 (100)	> 212 (100)	> 212 (100)	> 212 (100)	> 212 (100)	> 212 (100)
Flash Point, °F (°C)	1.04	0.86	0.99	0.98	0.98	0.98	1.01	0.95	0.98	0.98
VOC's, lbs/gal	6	6	6	6	6	6	6	6	6	6
Shelf Life @RT, months	55-85	55-85	55-85	55-85	55-85	55-85	55-85	55-85	55-85	55-85
Storage Temperature, °F										

Reference Notes

- ¹ Viscosity is measured using a Brookfield LV Viscometer, LV3 Spindle @ 30 RPM.
- ² Estimated Wet Film Thickness (WFT).
- ³ Recommended Dry Film Thickness (DFT).
- ⁴ Actual coverage will vary depending on material losses during mixing and application.
- ⁵ Primer is only recommended for exterior applications in which salt fog or moisture are present and the operating temperature is less than 750 °F.
- ⁶ Where a value is provided for "Min Air Set," it is recommended to set the coating at room temperature for, at minimum, the specified time prior to curing.
- ⁷ Adequate ventilation is required when curing these products as some outgassing will occur.
- ⁸ Curing is recommended but not absolutely required if the system is raised slowly to a minimum of 450 °F within 24-48 hours of application and not exposed to high moisture or rain during this initial dwell period.

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. Smooth metal surfaces should be abrasive blasted to an SSPC-SP6 near white blast. Remove abrasive residue using air pressure; do not clean with organic solvents.

Aremco's Corr-Prep™ CPR2000 is recommended as an alternative when sandblasting is not possible. This is a specially formulated, water-based, zinc phosphate metal etching solution that is non-toxic, non-flammable, non-caustic, and non-corrosive. It etches metal to provide surface profile for superior coating adhesion to aluminum, galvanized metal, steel, and stainless steel. It also helps to improve long-term corrosion protection. Application is simple — just brush or spray liquid on the substrate, allow to sit for 20-30 minutes, then rinse off and dry substrate thoroughly prior to coating.

Application Notes: Mix thoroughly before use to redisperse fillers and pigments. Apply using a brush, roller or spray gun. When spraying, a maximum dry film thickness of 2 mils (0.002") can be achieved by applying two coats. Recommended fluid nozzle diameter is 40-50 mils, atomizing pressure of 40-50 psi, and distance from work of 8-10". Adequate ventilation is required when applying and curing the coating. Read Safety Data Sheet for further safety instructions.

Abbreviations

NA Not Applicable
NR Not Required or Recommended
DFT Dry Film Thickness
WFT Wet Film Thickness
RT Room Temperature

Refer to Price List for complete order information.

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Corr-Paint™ CP3015-AL



Corr-Paint™ CP3015-BL

Aremco's Corr-Paint™ CP3015-xx series coatings are silicate-bonded, ceramic and/or metal-filled, aqueous-based systems that provide excellent resistance to thermal shock, oxidation, and chemical corrosion, with good color stability for applications as high as 1500 °F (816 °C).

These coatings are single-part, fast curing systems that adhere well to carbon and stainless steels, ceramics and refractories. Mainly recommended for interior system protection, several standard colors are provided and custom colors are available upon request.

PRODUCT HIGHLIGHTS

CP3015-AL Aluminum-Ceramic, 1200 °F (649 °C)

CP3015-BL Black Pigmented, 1500 °F (816 °C)

CP3015-GR Gray Pigmented, 1400 °F (760 °C)

CP3015-SS Stainless Steel, 1400 °F (760 °C)

CP3015-WH Off-White, Zirconia Filled, 1500 °F (816 °C)

TYPICAL APPLICATIONS

- Bag Houses
- Boiler Casings
- Ceramic Cloth
- Ceramic Fiberboard
- Chimneys & Stacks
- Heaters
- Heat Exchangers
- Exhaust Systems
- Engines
- Furnaces, Ovens, Kilns
- Rotary Calciners