

PRODUCT HIGHLIGHTS

542 Single part, ultra-low viscosity, water-dispersed, inorganic, aluminum phosphate solution for penetrating ultra-fine porosity applications 3000 °F (1650 °C).

503-VFG-C Single part, alumina-filled, water-dispersed, phosphate-bonded, highly abrasion and corrosion resistant sealer for applications to 3000 °F (1650 °C). Available in many standard colors.

503-VFG-C-WHT	White
503-VFG-C-BLK	Black
503-VFG-C-BLU	Blue
503-VFG-C-GRN	Green
503-VFG-C-RED	Red
503-VFG-C-ORG	Orange

634-ZOS Single part, zirconium oxide sealer produces a hard, oxidation resistant coating for applications to 3000 °F (1650 °C).

CP2000 Single part, urethane-based, gloss black, low viscosity, room temperature curing, abrasion and corrosion resistant sealer for applications to 400 °F (204 °C).

CP2040 Single part, ultra-low viscosity, fast-curing, corrosion resistant, clear phenolic sealer for impregnating micropores and cracks as fine as 0.0005" for applications to 400 °F (204 °C).

CP2080 Two-part, medium viscosity, clear Novolac-epoxy with exceptional abrasion and corrosion resistance for continuous operations to 300 °F (150 °C) and intermittent use to 400 °F (204 °C).

CP2090 Two-part, low viscosity, room temperature curing, epoxy sealer for continuous applications to 400 °F (204 °C).

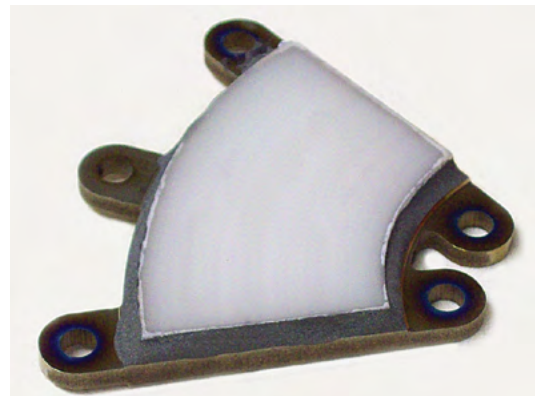
CP4010-S1-LV Single part, low viscosity, aluminum-rich, heat-curable, silicone sealer offering exceptional outdoor weathering resistance to 1100 °F (593 °C).

CP40XX-S2-HT Single part, low viscosity, room temperature curing, flame resistant, dielectric, silicone-glass-ceramic sealer offering continuous temperature resistance to 1500 °F (816 °C) and intermittent resistance to 1800 °F (982 °C).

CP4000-S2-HT	Black
CP4020-S2-HT	Navy Gray
CP4040-S2-HT	Navy White
CP4080-S2-HT	Navy Yellow



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



Ceramabind™ 542 seals thermal spray on sensor.



CP2000 seals thermal spray on small heater.



CP2000 seals thermal spray on motor housing.

HIGH TEMPERATURE THERMAL SPRAY SEALANTS

Product Number	542	503-VFG-C ⁶	634-ZOS	CP2000	CP2040	CP2080	CP2090	CP4010-S1-LV	CP4000-S2-HT ⁷
Tradename	Ceramabind™	Ceramacoat™		Corr-Paint™					
Type	Inorganic			Urethane	Phenolic	Novolac-Epoxy		Silicone	
Color (cured)	Clear	White	Off-White	Gloss Black	Clear	Clear	Amber	Aluminum	Black
Maximum Temperature, °F (°C)	3000 (1650)	3000 (1650)	3000 (1650)	400 (204)	400 (204)	400 (204)	400 (204)	1100 (593)	1800 (982)
No. Components	1	1	1	1	1	2	2	1	1
Mix Ratio, by Weight (by Volume)	NA	NA	NA	NA	NA	100:40 (2:1)	100:25	NA	NA
Viscosity, cP ¹	35–45	5,000–7,000	500–1,500	200–240	5–15	600–1000	100–200	100–150	150–500
Specific Gravity, g/cc	1.47	2.34	2.00	1.05	0.87	1.10	1.10	0.99	1.50
Solids by Weight, %	41.0	76.0	64.8	67.0	10.0	100.0	100.0	23.9	73.0
Solids by Volume, %	22.0	53.7	30.6	49.0	21.0	100.0	100.0	17.1	70.0
WFT, mils (microns) ²	4.54 (115.3)	1.86 (47.3)	3.27 (83.1)	2.00 (50.5)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	5.8 (14850)	1.43 (36.3)
DFT, mils (microns) ³	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	1.00 (25.4)	0.16 (4.1)	1.00 (25.4)	1.00 (25.4)	1.0 (25.4)	1.00 (25.4)
Theoretical Dry Film Coverage ⁴ @ 1 mil, ft ² /gal (m ² /liter)	353 (8.7)	861 (21.1)	490 (12.0)	722 (17.7)	260 (6.4)	1604 (39.3)	1604 (39.3)	274 (6.7)	1122 (27.5)
Curing, Min Air Set, hrs ⁵	1.0–2.0	1.0–2.0	1.0–2.0	0.5	0.5	8.0	1.0	1.0	1.0
Curing, Heat Cure, °F, hrs	200/1 + 500/1 + 700/1	200/1 + 500/1 + 700/1	200/2 + 350/1 + 500/1	RT/24 or 250/1	300/15	RT/24 or 150/2	RT/48 or 150/3	480/0.75	RT/24–48
Application Temperature, °F	50–90	50–90	50–90	50–90	50–90	50–90	50–90	50–120	50–90
Thinner	Water	503-T, Water	634-ZOS-T, Water	Hi-Flash Naptha	n-Butanol	Xylene	Xylene	PM Acetate	T-Butyl Acetate
Flash Point, °F/°C	NA	NA	> 200 (93)	140 (60)	73 (23)	> 200 (93)	> 200 (93)	111 (44)	117 (47)
Volatiles, lbs/gal	0.00	0.00	0.05	2.86	5.74	0.0	0.0	6.6	2.5
Shelf Life, months	6	6	6	12	12	12	12	6	3
Storage Temperature, °F	55–85	55–85	55–85	40–80	40–50	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 to set the coating at room temperature for, at minimum, the specified time prior to curing.

Ceramacoat™ 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-GRN	Green
503-VFG-C-RED	Red
503-VFG-C-ORG	Orange

Corr-Paint™ CP40XX-S2-HT

⁷ Available in the following standard colors:

CP4000-S2-HT	Black
CP4020-S2-HT	Navy Gray
CP4040-S2-HT	Navy White
CP4080-S2-HT	Navy Yellow

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. Quartz should be etched or sandblasted whenever possible.

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.

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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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.