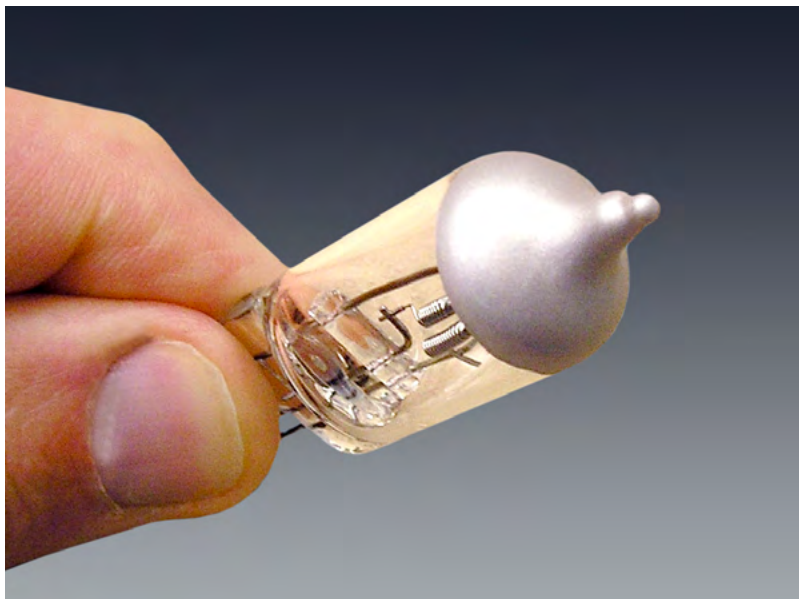




Lamp-Coat™ LC4010-GL applied to auto headlamp.



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.

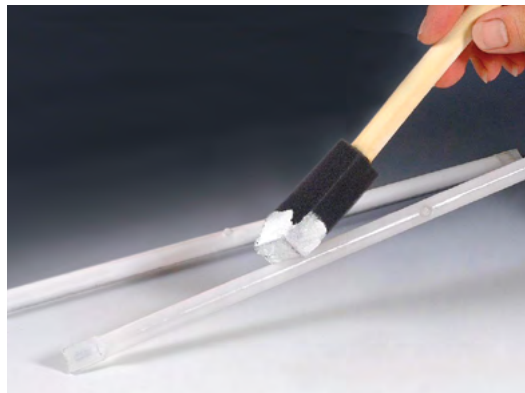
**845-BLK** Jet Black  
**845-BLU** Cobalt Blue  
**845-GRY** Light-Gray  
**845-GLT** Light-Green  
**845-GDK** Dark-Green  
**845-SIL** Silver  
**845-WHT** White

#### 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             |                      |                                    |
|-----------------------------------------------------------------------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|-----------------------------------|--------------|----------------------|----------------------|------------------------------------|
| Product Number                                                                                      | 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™        |                     | Ceramacoat™         |                     |                     |                     |                     |                     |                     | Aremco-Seal™     |                                   | Quartz-Coat™ | Lamp-Coat™           |                      |                                    |
| Color (cured)                                                                                       | Brown-Black         | Brown-Black         | Jet Black           | 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, cP <sup>1</sup>                                                                          | 200–400             | 500–800             | 1,000–1,500         | 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) <sup>2</sup>                                                                    | 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) <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)          | 1.00 (25.4)          | 1.00 (25.4)                        |
| Theoretical Dry Film Coverage <sup>4</sup><br>@ 1 mil, ft <sup>2</sup> /gal (m <sup>2</sup> /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, min <sup>5</sup>                                                               | 10                  | 10                  | 10                  | 10                  | 10                  | 10                  | 10                  | 10                  | 10                  | 30–60            | 30                                | 30           | 10                   | 5                    | 60                                 |
| Curing, Heat Cure, °F, min <sup>6</sup>                                                             | 200, 10<br>+ 900, 5 | 200, 10<br>+ 900, 5 | 200, 10<br>+ 900, 5 | 200, 10<br>+ 900, 5 | 200, 10<br>+ 900, 5 | 200, 10<br>+ 900, 5 | 200, 10<br>+ 900, 5 | 200, 10<br>+ 900, 5 | 200, 10<br>+ 900, 5 | 1150–1250,<br>30 | 200, 30<br>+ 350, 60<br>+ 1830, 1 | 1650, 15     | 200, 15<br>+ 900, 10 | 200, 30<br>+ 900, 10 | 200, 60<br>+ 450, 60<br>+ 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

- <sup>1</sup> Viscosity is measured using a Brookfield LV Viscometer; spindle and speed selection vary depending on the product.
- <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.
- <sup>6</sup> 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.

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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.