## Grade: ARMC-551-RN-MV

## Manufacturer: Aremco Products, Inc.

**Description:** Aremco's high temperature graphite adhesives are formulated using both phenolic and silicate binders to bond carbon, carbon fiber composite (CFC), and graphite components, structures and tools used in a broad range of applications to 5400 °F (2985 °C)

| Tradename                              |                            | Graphi-Bond™     |
|--|----------------------------|------------------|
| Major Constituent                      |                            | Graphite         |
| Color                                  |                            | Black            |
| Temperature Limit, ºF (ºC)             |                            | 5400 (2985)      |
| No. Components                         |                            | 1                |
| Viscosity, cP                          |                            | 60,000–90,000    |
| Specific Gravity, g/cc                 |                            | 1.15–1.25        |
| <b>CTE,</b> in/in/ºF × 10 (ºC)         |                            | 4.1 (7.4)        |
| Handling                               | Mix Ratio, powder:liquid   | NA               |
|  | Thinner                    | Ethanol*         |
|  | Application Temperature, P | 40–90            |
|  | Storage Temperature, ºF    | 30–75            |
|  | Shelf Life, months         | 6                |
| Curing                                 | Air Set, hrs               | 1-4              |
|  | Heat Cure, ºF, hrs         | 265, 4           |
|  |                            | + 500, 2         |
| Bond Type                              |                            | 99% Carbonaceous |
| Dielectric Strength, volts/mil @ RT    |                            | 130              |
| Lap-Shear Strength, psi @ RT Post-Cure |                            | 1425             |
| Moisture Resistance                    |                            | Excellent        |
| Alkali Resistance                      |                            | Good             |
| Acid Resistance                        |                            | Good             |

\* Graphi-Bond<sup>™</sup> 551-RN and 551-RN-MV can also be thinned with methanol and isopropyl alcohol