

ARC-4300, ARC 4300-C and ARC 4300-M Ablation Resistant Coatings

Our ARC-4300 is an amorphous silica coating, which is applied at ambient temperatures and does not require heat to cure. The novel composition of ARC-4300 prevents devitrification normally caused by thermal cycling and exposure to corrosives. ARC-4300 is supplied in liquid form and is applied by spraying. Water is used for clean-up. There are no known carcinogens or corrosives in the liquid or cured product. ARC-4300 will enhance the serviceable life of refractory and metals subject to high heat environments and thermal loads.

Three variants are available depending upon customer requirements:

ARC-4300	Unloaded system designed for ablation resistance only
ARC-4300 C	Resistive version designed for RF insertion loss along with ablation resistance
ARC-4300 M	MagRAM loaded version designed for RF attenuation with ablation resistance

Typical Applications for base materials:

- Ablation resistant coating for blast pads, burner blocks, and other high heat flux situations
- High temperature corrosion protection for metals and refractory
- High temperature processing equipment
- High temperature incinerator components
- Protection of substrates from oxidation by high heat flux

Features:

- Meets or exceeds requirements of US-MIL-C-7438F/G
- Thermal shock resistant
- Extremely low thermal conductivity
- NASA approved for use on Thermal Protection Tiles
- Prevents corrosion and carbonization of metal and refractory substrates
- Increases mechanical properties of fibrous refractory

Physical Properties:

- Non-fibrous, water-based solvent, 0% VOC
- Upper temperature limit more than 3,600 deg F (1,982 deg C)
- Ablative resistant to temperatures in excess of 2,800 deg F (1,540 deg C)
- Resistant to wind speeds to Mach 4