



120 Valley Court
 Oak Ridge, TN 37830
 Ph: 865-482-5717
 FAX: 865-482-1281
 zypcoatings.com

Carbo KS

Paintable Anti-Oxidation Coating for Carbon-Carbon

Carbo KS is a fast-drying, solvent-based coating that protects Carbon-Carbon components from oxidation during use as braking materials for aerospace or heavy mining-agricultural-construction trucks/ equipment. By simply applying, drying, and curing at 371 C (700 F) for 1-2 hours, a very robust coating is formed onto the Carbon-Carbon, protecting parts from oxidation/degradation at 816 C (1500 F) and above.

Key Attributes

- Tough, robust coating forms on applying and drying
- One-time cure at 371 C (700 F) for 1-2 hours to easily "set" the coating
- Specifically designed for Carbon-Carbon substrates
- Protects from oxidation to above 816 C (>1500 F)
- Capable of thermal cycling from ambient to use-temperatures without spalling or degradation
- Improves performance and durability of C-C braking systems

Ideal Uses

- Stopping oxidation and deterioration of C-C composites from high-temperature intermittent exposure cycles
- Reduces moisture pickup during ambient temperature downtime

Use Notes

1. Resuspend if needed.
2. Clean surfaces to be painted of any oils, dirt, scale, etc.
3. Apply one thin layer by brushing, dipping or air-spraying.
4. Dry at ambient temperature for 30 minutes or less, and apply second coating if desired – drying with same conditions.
5. One-time "cure" heatup with ramp rate of 20-40 C per min (36-72 F/min) to 371 C (700 F) for 1-2 hours.
6. Cured coating is now ready to use to protect Carbon-Carbon from oxidation with cycling from ambient to 816 C (1500 F) or higher.



Specifications

Active ingredients	Stable Refractory
Max Use Temperature with All Atmospheres	> 816 C (>1500 F)
Fired Composition	>50% Stable Refractory Inorganic Mixture
Liquid Carrier	n-Butyl Acetate
Binder Phase	Organic Polymer
Brookfield Viscosity (cps)	400-600 cps
Specific Gravity	1.4
Color	Gray
Shelf Life (months)	>12
Coverage (ft ² /gal.)	75-200 (depends on coating thickness)
H F R Ratings	2-3-0
Substrate Use	Carbon-Carbon

TEST DATA: Cubes of C-C heated in air, immediately from ambient to 816 C (1500 F) for 2 hours "soak", and air-quenched with three cycles exhibited less than 5% weight loss.

Sizes and colors

Product is gray
 Standard Size: quart or gallon Nalgene container

Safety Information

- Consult SDS before use.
- Avoid breathing of vapors.
- For Industrial use only.

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