



Cerablak™

Increase the lifetime of your parts and decrease your costs with an environmentally friendly coating.

Unique Properties

- High-temperature oxide glass
- Tailorable properties (CTE, color, coating thickness)
- Excellent oxygen barrier

Versatile Product

- Can be used over a wide temperature range RT-1400°C (2550°F)
- Compatible with many substrates
 - Metals
 - Alloys
 - Glass
 - Ceramics
- Many Applications
 - Oxidation and corrosion protection
 - Non-stick coatings
 - Insulating coatings

Environmentally Friendly

- No heavy metals
- Low VOC formulation available (water-based)

Cost-Efficient

- Inexpensive reagents
- Low application cost (spray, dip, brush coating)
- Simple and scalable

Comparison of Properties of Cerablak™ with Other Materials

	Teflon	Enamel	Cerablak	Al ₂ O ₃	Cr ₂ O ₃
Melting Point (°C)	327	1550	>1600	2015	2300
Maximum Use Temperature (°C)	260	850-1000	>1400	1750	1000
Density (g/cm³)	2.15	2.5-3	2-2.5	3.96	5.2
Oxidation protection	⊘	✓	✓	✓	✓
Corrosion protection	✓	✓	✓	✓	✓
Non-Stick Properties	✓	Limited	✓	⊘	⊘
Environmentally Friendly	⊘ Production of trifluoroacetic acid	⊘ Generation of Waste	✓ Low VOC formulation possible (aqueous)	⊘ Production of HCl if use of CVD process	⊘ Cr highly toxic.
Easy to apply	✓ Spray	⊘ Fusion process at 750 to 850°C	✓ Spray, dip, flow, brush and spin coating	⊘ CVD, PVD, Thermal spray	⊘
Low Cost	✓	⊘	✓	⊘	⊘