

Coatings

Coatings Material Overview

Refractory Specialties makes a variety of coatings for enhancing the surface of our insulation material. Each coating has been custom formulated to address specific needs. Most coatings can be purchased directly, and all of them can be applied to Gemcolite insulation material prior to shipping, so parts arrive ready for use. If there is a coating application you need, and it isn't listed, feel free to contact our experts at (330) 938-2101 for help with finding a custom solution to your surface requirements.

RS-181 is an alumina based surface paint designed to impart wear resistance to Gemcolite insulation products. It provides excellent surface properties in applications like kilns and dryers, where normal, uncoated refractories would erode quickly over time.

COA-BN is a Boron-Nitride based coating with excellent slip characteristics, and is alumina non-wetting. It is useful in ladle liners and tip-board application, or anywhere molten metal penetration is a concern.

SIN-A is a high purity Aluminum Oxide coating with moderate slip characteristics, and produces a dust free part when applied to Sinterlyte materials. SIN-A coating is designed to provide a more durable impact resistant surface, and provide a chemically non-reactive surface for kiln furniture applications.

SIN-C is a Cerium Oxide coating with moderate slip characteristics, and produces a dust free part when applied to Sinterlyte materials. SIN-C coating is designed to provide a more durable impact resistant surface, and provide a chemically non-reactive surface for fuel-cell kiln furniture applications.

SIN-Z is a Ytria-Stabilized Zirconia coating with moderate slip characteristics, and produces a dust free part when applied to Sinterlyte materials. SIN-Z coating is designed to provide a more durable impact resistant surface, and provide a chemically non-reactive surface for kiln furniture applications, for example in fuel cell firing processes.

Please note, all coatings must be kept from freezing and mixed well prior to use to retain full utility.

Coatings Technical Information

<u>Property</u>	<u>RS-181</u>	<u>COA-BN</u>	<u>SIN-A</u>	<u>SIN-C</u>	<u>SIN-Z</u>
Density	11 lb/gal	10lb/gal	8.5 lb/gal	9.4 lb/gal	9.6 lb/gal
Maximum Continuous Use Temperature	2300° F	2300° F	2900° F	2900° F	2900° F
Typical Chemical Analysis (After Use)					
SiO ₂ (Weight Percent)	33 %	2 %	0 %	0 %	0 %
Al ₂ O ₃ (Weight Percent)	65 %	45 %	99%	0 %	1%
CeO ₂ (Weight Percent)	0 %	0 %	0%	99%	0 %
Y ₂ O ₃ (Weight Percent)	0 %	0%	0%	0 %	13%
ZrO ₂ (Weight Percent)	0 %	0 %	0%	0 %	84%
Other (Weight Percent)	2%	53 %	1%	1%	2 %

Other Information

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