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## Zypcoat® BAS

### Very-High-Temperature Coating that forms CELSIAN In-situ

Zypcoat® BAS is a water-based coating of Barium Carbonate ( $BaCO_3$ ), Aluminum Oxide ( $Al_2O_3$ ), and Silicon Oxide ( $SiO_2$ ). The coating forms Celsian ( $BaAl_2Si_2O_8$ ) above 1000 C. Celsian has high chemical stability and reportedly melts circa 1760 C. Zypcoat BAS is a very economical coating that is usable to at least 1650 C on most all substrates and with all atmospheres. Thus, Zypcoat BAS should be applicable as a protective layer for most refractories.

#### Key Attributes

- Provides non-reactivity with many materials, including molten Aluminum
- Use temperature expected to be at least 1650 C in all atmospheres
- Erosion-resistant/tough coating on all substrates
- Very economical, water-based, easy-to-use and cleanup

#### Ideal Use

- Very-high-temperature use areas
- Stopping reactions/interactions with other refractory substrates
- Barrier coating to prevent diffusion, reactions, and sticking of parts during heat treating

#### Use Notes

1. Resuspend if needed.
2. Use full strength, or dilute as desired .
3. Clean surfaces to be painted of any oils, dirt, scale, etc.
4. Apply a thin layer by brush.
5. Allow to thoroughly dry before use.

#### Safety Information

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



#### Specifications

Active Ingredient	$BaCO_3 - Al_2O_3 - SiO_2$
Max Use Temperature with All Atmospheres	$\geq 1650\text{ C } (\geq 3002\text{ F})$
Fired Composition	Major = Celsian, $BaAl_2Si_2O_8$
Liquid Carrier	Water
Binder Phase	Proprietary
Brookfield Viscosity (cps)	100 @ 2/60
Specific Gravity	1.4
Color	Yellow-Orange
Shelf Life (months)	$>12$
Coverage (ft <sup>2</sup> /gal)	100-400
Coating pH	7-8
H F R Ratings	1-0-0
Substrate Use	All

#### Sizes and colors

Zypcoat BAS is a yellow-orange colored paint.  
 Standard size: 1 gallon pail

#### CAUTION: DO NOT CONTACT WET COATINGS WITH MOLTEN METAL.

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