



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

Zypcoat® CZO

Calcium Zirconate Water-Based Coating

Zypcoat® CZO is based on a lesser-known mixed oxide – namely Calcium Zirconate or Calcium-Zirconium-Oxide, CaZrO_3 , which has melting point of 2325 C. Zypcoat CZO forms 100% CaZrO_3 on heating over 500 C. It is usable in air atmospheres as well as inert/vacuum to temperatures to >2000 C, while bonding well to all substrates – ceramic, graphite, metal. Due to its high melting point and expected high stability with most materials, Zypcoat CZO is suitable for R&D studies at extreme temperature and conditions.

Key Attributes

- Unique compound of CaO and ZrO_2
- Very high temperature melting point and use-temperature
- Expected low thermal and electrical conductivity
- Usable in all atmospheres
- Water-based, easy to use and cleanup

Ideal Use

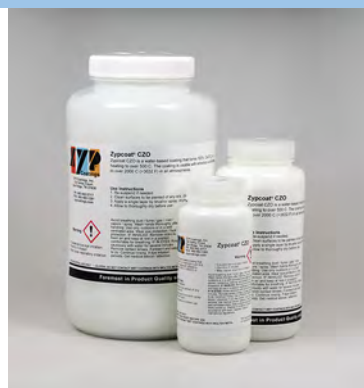
- High-Temperature Ceramics (HTC) research/development
- Testing in extreme environments
- Reactive-molten metal processing
- Barrier coating to prevent interactions

Use Notes

1. Re-suspend if needed. Dilute sparingly with water if desired.
2. Clean surfaces to be painted of any oils, dirt, scale, etc.
3. Apply a single layer by brush or spray, drying after each layer.
4. Allow to thoroughly dry before use.

Safety Information

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



Specifications

Active Ingredient	CaZrO_3
Max Use Temperature with All Atmospheres	>2000 C (>3632 F)
Fired Composition	100% CaZrO_3
Liquid Carrier	Water
Binder Phase	CaO-ZrO_2
Brookfield Viscosity (cps)	2000 @ 3/30
Specific Gravity	2.25
Color	White
Shelf Life (months)	>12
Coverage (ft^2/gal)	100 to 400
Coating pH	2
H-F-R Ratings	1-0-0
Substrate Use	All
Other	Contains no Silicon Oxide and no Boron

Sizes and Colors

Zypcoat CZO is a white-colored paint.

Standard Sizes: gallon, quart, or pint
Nalgene containers

CAUTION: DO NOT CONTACT WET COATINGS WITH MOLTEN METAL.

ZYP Coatings, Inc. (ZYP) makes no warranties, express or implied, including the warranty of merchantability or fitness for a particular service. Product is for industrial/commercial use only. Users should determine suitability for their use. In no event will ZYP be liable for any direct, indirect, incidental, special or consequential damages or losses including, but not limited to loss of profits, in any way related to this product regardless of the legal theory asserted.