

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

High Purity Yttrium Oxide (Y2O3) Thick Paste

Yttria Paste is a thick consistency formulation of our Type Y coating, based on the most thermodynamically stable oxide (Yttrium Oxide, Y_2O_3) – usable in vacuum and inert atmospheres to 2000 C (3632 F). Yttria Paste is ideal for sealing/filling crevices and for "seating" ceramic or graphite parts. Also, Yttria Paste can be brushed "as is" or blended with Type Y to achieve most any viscosity desired for a washcoat (or mold wash) type of coating. This paste should NOT be used in air atmospheres due to the binder loss in air.

Key Attributes

- Superior stability with molten, highly reactive metals/alloys, slags, salts, and glasses
- Good erosion resistance at high temperatures
- Low thermal and electrical conductivity
- Use temperature to 2000 C in vacuum or inert atmospheres
- Water-based, easy to use and cleanup

Ideal Use

- Reactive-molten metal processing and transport
- Sealing/filling/seating components
- Adjusting viscosity of Type Y sprayable coating
- Stop-off/anti-stick with reactive brazing and diffusion bonding
- Lubricant for back-extrusion of reactive metals

Use Notes

- 1. Clean surfaces of any oils, dirt, scale, etc.
- 2. If desired, adjust viscosity with distilled or demineralized water.
- 3. Apply by brush or spatula to desired thickness.
- 4. Allow to thoroughly dry before use.

Safety Information

- · Consult SDS before use.
- For Industrial Use only.



Specifications

Active Ingredient Y₂O₃ Max Use Temperature

Inert, Vac (no C) 3632 F / 2000 C Vac (with C present) 2732 F / 1500 C Air = NOT RECOMMENDED

Use Atmosphere	Vacuum or Inert
Fired Composition	>99% Y ₂ O ₃
Liquid Carrier	Water
Binder Phase	Cellulosic
Viscosity (cps)	Very Thick Paste
Specific Gravity	1.95
Color	White
Shelf Life (months	>12
Coverage (ft²/gal)	100
Coating pH	7-8
H F R Ratings	1-0-0
Substrate Use	All

Sizes and colors

Yttria Paste is a white colored paste
Standard Size: 1 gallon keg container
1 quart wide-mouth container

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/commecial 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.