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Family of Yttrium Oxide Specialty Products

Water-Based Coatings

- [Type Y](#) ... washcoating: soft but very high-purity of over 99% Yttria after firing; usable vacuum/inert to over 1500 C but not recommended for applications in air atmosphere
- [SPFY](#) ... Yttria coating specially designed for superplastic forming, isothermal forging, and back-extrusion lubrication; good to 1400 C in all atmospheres
- [Type Y-CZ](#) ... Yttria-Calcium Zirconate coating (79% Y_2O_3 after firing) – high stability / erosion-resistant coating; usable to 2000 C in all atmospheres
- [Yttria StopOff](#) ... interaction-barrier, tough/adherent Yttria coating; good to 1000 C in all atmospheres
- [SpackleKote Y](#) ... ready-to-use spackling putty composition for use to 1400 C in all atmospheres
- [RefClay Y](#) ... refractory clay of Yttrium oxide – moldable/press-formable; after firing, usable to 1400 C in air/OK in all atmospheres

Powders

- [Y-FZM 1400 Powder](#) ... powder that forms instant 'slurry' on adding water for ambient pouring/casting/cementing of Yttria-based refractory which, after firing, is usable to 1400 C in all atmospheres
- [PlasterMix YY](#) ... all Yttria-based plaster-forming (on adding water) dry powder – after firing, usable to 1400 C in all atmospheres
- [Yttria CeraCast Powder](#) ... a dry Yttrium Oxide (Y_2O_3) powder mix which, on adding around 50 wt% water and stirring, can be poured/cast into silicone molds to form parts which are typically $\geq 85\%$ dense after firing to 1300 C.

Solvent-Based Coatings

- [Y Aerosol](#) ... aerosol spray-can of Yttrium Oxide – forms a soft coating yielding over 98% pure Y_2O_3 as fired; air usable to 1900 C/ OK in all atmospheres
- [Y Aerosol Brushable](#) ... "bulk" version (same otherwise as the aerosol-can version)
- [Type YK Paint](#) ... washcoating with low outgassing; usable in vacuum/inert to over 1500 C but not recommended for applications in air atmosphere
- [Y-Stop S](#) ... a solvent-based, fast-drying Yttrium Oxide (Y_2O_3) coating providing good adherence to substrates. Ideal as brazing stop-off or parting agent needs.

Water-Based Paste

- [Yttria Paste](#) ... a thick consistency formulation of our Type Y coating) – ideal for sealing/filling crevices and for "seating" ceramic or graphite parts.