High Purity Titanium Nitride (TiN), Water-Based Tray Coating

Traycoat paints are barrier-separation coatings for powder metallurgy and vacuum sintering processes. They are designed for graphite as well as refractory metal or ceramic sintering trays and boats used to over 1500 C in hard vacuum.

Traycoat TW is a ready-to-use water-based paint.

Key Attributes

- Maintains Consistent Carbon Contents of Sintered Parts
- Prevents Warping
- Extends Tray Lifetime
- Reaction-barrier Layer
- Applied Like House Paint
- Safe, Water-Based, No VOC’s

Ideal Use

- Graphite Trays/Boats for Cobalt-bonded WC, TiC, TaC Parts
- Carbon Barrier/Separator Layer
- Rare Earth Magnets
- Reactive Refractory Metal Sintering

Use Notes

1. Make sure that you need a TiN water-based tray coating.
2. Resuspend; can dilute with water at 10% if desired.
3. Clean surfaces to be painted of any loose graphite/carbon dust, oils, dirt, scale, etc.
4. Apply one thin layer by brush or spray like ordinary house paint.
5. Allow to thoroughly dry at room temperature before use.

Safety Information

- Consult MSDS before use.
- Avoid breathing of vapors.
- For Industrial use only.

Specifications

- Active Ingredient: TiN
- Max Use Temperature: Inert 3452 F / 1900 C
- Use Atmosphere: Inert/Vac
- Fired Composition: 97%TiN
- Liquid Carrier: Water
- Binder Phase: Al_2O_3
- Brookfield Viscosity (cps): 950-1600 @3/60
- Specific Gravity: 1.7
- Color: Gold-to-Brown
- Shelf Life (months): >12
- Coverage (ft^2/gal): 100 to 400
- Coating pH: 2-3
- H F R Ratings: 1-0-0
- Substrate Use: All

Sizes and colors

Traycoat TW is a gold-to-brown colored paint.

Standard Size: 1 gallon wide-mouth Nalgene container.

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