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Titanium Nitride Traycoat Traycoat T Aerosol Brushable

“Bulk” Solvent-Based Tray Coating of Titanium Nitride (TiN)

Traycoat paints are barrier-separation coatings for powder metallurgy and vacuum sintering processes. As such, 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 T Aerosol Brushable is a ready-to-use solvent-based paint.

Key Attributes

- Maintains Consistent Carbon Contents of Sintered Parts
- Prevents Warping
- Extends Tray Lifetime
- Reaction-barrier Layer
- Easy-to-Use, Fast-Drying, Solvent Based

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 solvent-based tray coating.
2. Resuspend; can dilute with acetone (for faster drying) or ethanol (for slower drying).
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 SDS before use.
- Avoid breathing of vapors.
- For Industrial use only.

TITANIUM NITRIDE TRAYCOAT SELECTION

When processing LOW COBALT PARTS (to 8% Co), TiN provides the most effective carbon barrier. TiN is also ideal for Rare-Earth Alloys and is good with Molybdenum trays often used with them. The TiN also can be used for refractory metals and non-Co-containing parts. The TiN coatings are typically re-applied after each cycle.

For HIGH COBALT PARTS, see our Aluminum Oxide Traycoat paints, which also can be used for any level of Cobalt contents.

Specifications

Active Ingredient	TiN
Max Use Temperature	Air 662 F / 350 C Vac 2912 F / 1600 C Inert 3452 F / 1900 C
Use Atmosphere	All
Fired Composition	>97% TiN
Liquid Carrier	Ethanol/Acetone
Binder Phase	Magnesium Silicate
Brookfield Viscosity (cps)	350-650 @3/60
Specific Gravity	1.3
Color	Golden-Brown
Shelf Life (months)	>12
Coverage (ft ² /gal.)	100-400
H F R Ratings	1-3-0
Substrate Use	All
Other:	Nearly water insoluble after drying Do not exceed 350 C in air with TiN

Sizes and colors

Traycoat T Aerosol Brushable is golden-brown.
Standard Size: 1gallon wide-mouth
Nalgene container

Note: Traycoat T Aerosol is no longer available.

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

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