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

Type TN Mod is a water-based paint that yields a low-to-medium-hardness coating that is 97% Titanium Nitride and 3% Aluminum Oxide when heated >600 C (>1112 F). Easy-to-use coating that is suitable for inert atmospheres to 1900 C (3452 F) or in vacuum to 1600 C (2912 F). The coating SHOULD NOT BE USED IN AIR ABOVE 350 C (662 F).

Key Attributes

- Resistant to Molten Metals
- Moderately-Good Electrical Conductivity
- High Thermal Conductivity
- Stable/Unreactive with Carbon/Graphite
- Applied Like House paint
- · Safe, Water-Based, No VOC's

Ideal Use

- Crucible/Mold Coatings for Reactive Molten Metals
- Carbon Barrier Layer
- Separator Layer
- Electrically Conductive Layer

Use Notes

- 1. Resuspend if needed. Can dilute with water.
- 2. Clean surfaces to be painted of any oils dirt, scale, etc.
- 3. Apply one thin layer by brush or spray like ordinary house paint. Apply additional layers if needed, after drying prior layer.
- 4. Allow to thoroughly dry at room temperature before use.

Safety Information

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



Specifications

Active Ingredient TiN Max Use Temperature

Inert 3452 F / 1900 C Vac 2912F / 1600 C Air - Not over 662 F / 350 C

Use Atmosphere Inert/Vac Fired Composition 97%TiN Liquid Carrier Water Binder Phase Al₂O₃ Brookfield Viscosity (cps) 950-1600 @3/60 Specific Gravity Color Gold-to-Brown Shelf Life (months >12 Coverage (ft²/gal) 100 to 400 Coating pH 2-3 H F R Ratings 1-0-0 Substrate Use ΑII

Sizes and colors

Type TN-Mod is a gold-to-brown colored paint.

Standard Size: 1 gallon Nalgene container

CAUTION: DO NOT CONTACT WET COATINGS WITH MOLTEN METAL.

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