BN High Purity is a relatively-soft, washcoat-type of Boron Nitride (BN) coating that provides high-purity (over 99% pure) BN after firing. The coating is usable in vacuum to 1400 °C (2552 °F) and inert atmospheres to 1800 °C (3272 °F). This coating should NOT be used in air atmospheres.

Key Attributes

- Provides, in a water-based paint, the great properties of BN—low electrical conduction; high thermal conduction (like stainless); prevent reactions/interactions between materials; superior release/nonwetting.
- Applies like housepaint (brush, dip, air-spray)
- Easily applied by air spraying on to hot or cold crucibles and molds
- Great with molten metals, glasses, fluxes, slags
- Safe, Water-Based

Ideal Use

- Crucibles and Molds
- Anti-stick/Release
- Barrier 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 1-3 layers by brush dip or air-spray like ordinary house paint, drying after each layer
4. Allow to dry thoroughly at room temperature before use.

Safety Information

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

Specifications

Active Ingredient: BN
Max Use Temperature:
- Inert 3272 °F / 1800 °C
- Vac 2552 °F / 1400 °C
- Air = NOT RECOMMENDED

Use Atmosphere
- Vacuum or Inert
- 99% BN

Fired Composition
- Water

Binder Phase
- Cellulosic

Active Ingredient Level
- Fully Loaded

Brookfield Viscosity (cps)
- 600-1100 @3/60

Specific Gravity
- 1.06

Color
- White

Shelf Life (months)
- >12

Coverage (ft²/gal)
- 100 to 400

Coating pH
- 7-8

H F R Ratings
- 1-0-0

Substrate Use
- All

Sizes and colors

- BN High Purity is a white colored paint.
- Standard Size: 1 gallon Nalgene 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/commercial 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.