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## BN EsoCera Clay

### Boron Nitride-Based Claylike Material

BN EsoCera Clay is an esoteric ceramic claylike material that is loaded with Boron Nitride in order to impart the great properties of BN into a formable clay. Thus, if you are familiar with clay-based ceramics, this BN EsoCera Clay works identically to normal ceramic clay – allows the user to form parts by hand or press-form shapes as desired, followed by drying and then firing to a strong, well-bonded body by heating to 1000 C in air for ½ hour “soak”.

#### Key Attributes

- Safe, water-based, easy to use and cleanup
- Ready-to-form into specialty shapes by hand forming or press forming with silicone or plaster press-molds into most any shape
- Forms Boron Nitride based ceramic shapes after drying and firing

#### Ideal Use

- Making your own parts with BN performance
- For 1000 C upper use temperature in all atmospheres
- Molten nonferrous-metal-resistant ceramic pieces

#### Use Notes

1. Remove desired amount of clay from container.
2. Form by hand or trowel/spatulate into silicone or plaster press-mold of the desired shape.  
Note that vibration (shaking or using dental-vibrator) can greatly thin out this claylike material for better filling of press-molds.
3. Thoroughly dry at room temperature, preferably overnight, while in the mold ... or after hand forming.
4. Place into lab dryer at 50-60 C for 1-2 hrs, remove from mold (if used) and dry further.
5. Fire the part in air with the furnace/kiln heating rate (suggested) of about 3 C/minute (5.4 F/min) from room temperature to 1000 C (1832 F) and “soak” for ½ hour.
6. The fired part will have very little shrinkage and is ready-to-use for high-temperature performance.

#### Safety Information

- Consult SDS before use.
- For Industrial Use only.



#### Specifications

Active Ingredient	BN + ceramic
Max Use Temperature with All Atmospheres	1000 C (1832 F)
Fired Composition	57% BN; remainder Na-K-Al-Si-O ceramic
Liquid Carrier	Water
Consistency	Claylike, easily spatulated and press-molded
Color	Gray (fires to White)
Shelf Life (months)	>12
pH	8
H F R Ratings	1-0-0

#### Sizes and colors

BN EsoCera Clay is a gray colored claylike material.

Standard Size: quart and 8-oz epoxy-lined cans

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