

SLICOAT ULTRA Boron Nitride Coating

General Information

ZIRCAR Ceramics' SLICOAT ULTRA Boron Nitride Coating is a uniquely new, water-based dispersion of fine BN crystals that dries fast and adheres well when it is applied to virgin as well as surfaces previously treated with other brands of BN coatings. SLICOAT Ultra can be brushed, rolled or spray applied onto a myriad of industrial surfaces. SLICOAT ULTRA provides the benefits of a very lubricious, non-stick, non-wetting high-temperature coating. Boron Nitride coatings are used extensively in molten nonferrous metal contact as well as vacuum hot press and brazing applications. SLICOAT ULTRA can significantly extend the life of consumable refractories and ceramic fiber products used in continuous casting application. This can result in cleaner, higher-quality metal and greater profits for your business.



Characteristics & Properties

| Color | White & Green |
|-------------------------------------|---|
| Carrier | Water |
| Total Solids, % | 25 |
| BN Content, % | 20 |
| BN Particle Size | 6 Microns |
| Shelf Life (Do not allow to freeze) | 12 months |
| Maximum Use Temperature*, ºC (ºF) | Oxidizing 850(1562) |
| | Inert 1800(3272) |
| Dilution | SLICOAT ULTRA has the consistency of a thick high quality latex paint. It can be diluted with clean water making it suitable for your preferred application method. |
| рН | 4.0 - 5.0 |
| Weight, lb/gal (kg/l) | 9.7 (1.2) |

The data presented herein is intended to help the user determine the appropriateness of this material for their application. This data is a nominal representation of this product's properties and characteristics and therefore should not be used in preparing specifications. * Maximum use temperature is dependent on variables such as stresses, both thermal and mechanical, and the chemical environment that the material experiences.

Suggested Applications

In addition to bringing significant utility to **Non-Ferrous Metal Casting and Transport** applications SLICOAT ULTRA is ideally suited for **Glass Making**. Used as a glass forming mold release agent, SLICOAT ULTRA helps to bring out the best optical properties in smooth glass by minimizing surface defects. Most glass compositions do not stick to Boron Nitride coatings. **Powder Metal Sintering** and **Diffusion Bonding Separator**. SLICOAT ULTRA can minimize sintering shrinkage related distortion of metal and ceramic powders and can act as an inert barrier preventing carbon pickup from graphite kiln furniture.

ZIRCAR Ceramics, Inc.

PO Box 519 100 N. Main St., Florida, NY 10921-0519 Telephone: +1 (845) 651-6600 **E-mail: sales@zircarceramics.com** Technical Data Bulletin SLICOAT ULTRA Boron Nitride Coating www.zircarceramics.com Page 1 of 2

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SLICOAT ULTRA bonds well to existing BN coatings forming a hard and durable layer.

SLICOAT ULTRA is ideal for spray coating a uniform, thin, long-lasting layer on castertips and other refractories.

How to Use SLICOAT ULTRA

Regardless of the method of application, whether brushing, spraying or dipping, SLICOAT ULTRA should be thoroughly stirred to ensure uniform suspension of solids. Should your particular technique require SLICOAT ULTRA to be thinned, use deionized or distilled water. Dilution with 15wt% water makes SLICOAT ULTRA quite sprayable. SLICOAT ULTRA should be applied in thin layers and thoroughly dried before using. SLICOAT ULTRA should be dried in an application specific manner prior to putting into service.

Availability

| ITEM # | DESCRIPTION |
|----------|----------------------------|
| D186C-01 | SLICOAT ULTRA, 1 Gal |
| D186C-02 | SLICOAT ULTRA, 5 Gal |
| C186D-01 | SLICOAT ULTRA GREEN, 1 Gal |
| C186D-02 | SLICOAT ULTRA GREEN, 5 Gal |

To Order

Standard items: Specify quantity, item # and description. SLICOAT ULTRA is batched to order ensuring maximum freshness.

> ZIRCAR Ceramics, Inc. PO Box 519 100 N. Main St., Florida, NY 10921-0519 Telephone: +1 (845) 651-6600 E-mail: sales@zircarceramics.com www.zircarceramics.com Revision Date Nov 21, 2023