BorNiGuard
DATA SHEET

DESCRIPTION

BorNiGuard aerosol spray provides a convenient way to apply a thin film of highly refined hexagonal **bor**on **ni**tride particles (ceramic) coating on any surface. BorNiGuard is a high temperature anti-stick release agent & lubricant effective at temperatures in excess of 2500°F (1371°C). BorNiGuard is easy to apply, dries fast at room temperature, and adheres to a wide variety of surfaces.

ADVANTAGES

- Bonds well with many substrates and forms a durable film
- Excellent lubricating properties
- Chemically inert
- Electrically insulative at all temperatures
- Thermally conductive (for good heat dissipation)
- High-temperature stability (1000°C in air, 1400°C in vacuum & 1800°C in inert gas)
- Low thermal expansion
- Contains no fluorocarbons or lead
- Not harmful to Ozone

APPLICATIONS

- Welding & Brazing: protects against weld spatter
- Metal Cutting – oxy-fuel, laser, plasma
- Sintering: Eliminates sticking & carbon contamination
- Plastic & Rubber Molds: Release agent
- Glass making: Extends mold/die life
- Molten metal processing & metal forming: Inhibits corrosion
- Casting, extrusion, forging & stamping
- High temperature protective release coatings

CHARACTERISTICS

Color	White
Purity of Active Ingredient	>99% BN
Use Atmosphere	All
Use Temperature	1000°C (1800°F) air 1400°C (2550°F) vacuum 1800°C (3275°F) argon, nitrogen, inert
Hardness Rating	Low to Medium
Carrier	Acetone, Butanone, LPG
Applicable Substrates	All
Other	Nearly water insoluble after drying

METHODS OF USE

- Consult Safety Data Sheet (find at www.BorNiGuard.com
    - Shake can vigorously until mixing ball is heard, continue for about one minute. Use in well ventilated area.
- Clean surfaces to be coated of any oils, grease, dirt, oxides, scale, etc.
- Allow to dry thoroughly before use; BorNiGuard contains fast drying solvents and dries within 20 seconds for required thin layers. It is OK to apply more layers after first layer is dried.
- Never contact wet coating with molten metal.
- Never get the aerosol can close to a heat source.
- The dried coating is ready for use at room temperature, in cryogenic conditions, or up to very high temperatures.
- After use, invert the can and press button for 1-2 seconds to clear the nozzle.

STORAGE & SHELF LIFE

The aerosol can should be kept away from open flames, electric arcs, and other high-energy ignition sources. Shelf life is 24 months from date of certification.

ALLCHEM

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