

## Technical Data Sheet

# Niobium Boride Powder

**Product ID:** 410501PD001 / 410501PD002

**Formular:** NbB<sub>2</sub>

**Molecular weight:** 114.53 g/mol

**CAS No.:** 12007-29-3

**EINECS No.:** 234-503-3

**Color:** Dark gray

**Description:** Niobium Boride powder features an ultra-high melting point, excellent hardness, outstanding electrical and thermal conductivity, and superior oxidation and wear resistance, making it ideal for high-temperature and advanced ceramic applications.

**Application:** Ultra-high-temperature ceramics (UHTCs), wear-resistant coatings, cutting tools, conductive ceramics, composite materials, and aerospace components.

**Product  
Image:**



### 1. Sizes

| Product ID  | Formula                  | Size       |
|-------------|--------------------------|------------|
| 410501PD001 | NbB <sub>2</sub> (99.5%) | -325 Mesh  |
| 410501PD002 | NbB <sub>2</sub> (99.5%) | D50< 10µm  |
| 410501PDDZ  | NbB <sub>2</sub> (99.5%) | Customized |

### 2. Chemical compositions

| Element<br>Typical<br>Value<br>Purity | Metal impurities (ppm) |       |       |        |       |       |
|---------------------------------------|------------------------|-------|-------|--------|-------|-------|
|                                       | Fe                     | Ni    | Cr    | Si     | Mo    | Ti    |
| 99.5%                                 | ≤ 2000                 | ≤ 500 | ≤ 500 | ≤ 1000 | ≤ 500 | ≤ 500 |

*Note: The purity values shown are calculated by subtracting the sum of selected measured elemental impurities from 100%. These values do not represent the result of a full elemental analysis.*

### **3. Packaging**

Bottle/Bag.

Double vacuum packed.

Customized packaging available upon request.

### **4. Period of Validity**

It is recommended to use this product within 12 months. If it is overdue, the product quality status should be re-evaluated.

### **5. Handling and Storage**

Handle in a well-ventilated area and avoid generating dust; wear appropriate personal protective equipment (PPE) during use.

Store in a tightly sealed container in a cool, dry place away from moisture and strong oxidizing agents.

### **Contact Us**

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