# SAFETY DATA SHEET

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Identifier**

| | |
|---|---|
| **Product Name** | BN Glass Release Brushable |
| **Product Code** | 1123 |

**Safety Data Sheet Supplier Information:**

| | |
|---|---|
| **Manufacturer** | ZYP Coatings, Inc.<br>120 Valley Court<br>Oak Ridge, TN 37830<br>www.zypcoatings.com |
| **Telephone (General)** | (865) 482-5717 8:30 AM - 5:00 PM EST. |
| **Emergency Telephone Number** | (800) 255-3924 – ChemTel<br>(813) 248-0585 Outside of US – Call Collect |

## 2. HAZARDS IDENTIFICATION

**GHS CLASSIFICATION:**

**Signal Word** **Warning**

SYMBOL(S)

**PRIMARY ROUTES OF EXPOSURE** Inhalation and contact to the eyes.

**HAZARD STATEMENTS**

| | | | |
|---|---|---|---|
| Eye Irritant | Category 2B | H320 | Causes eye irritation |
| STOT:SE | Category 3 | H335 | May cause respiratory irritation. |

**PRECAUTIONARY STATEMENT(S)**

| | |
|---|---|
| P261 | Avoid breathing dust / fume / gas / mist / vapors / spray. |
| P264 | Wash hands thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P304 + P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312 | Call a POISON CENTER or doctor / physician if you feel unwell. |
| P337 + P313 | If eye irritation persists: Get medical advice/ attention. |
| P403 + P233 | Store in well-ventilated place. Keep container tightly closed. |
| P405 | Store locked up. |
| P501 | Dispose of contents/ container in accordance with local/ regional/ |

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national/ international regulations.

| | |
|---|---|
| Health | 1 |
| Fire | 0 |
| Reactivity | 0 |

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

| Chemical Name | Hazard Components Identifiers | | Wt.% |
|---|---|---|---|
| Water | CAS No. | 7732-18-5 | 20-30 |
| Boron Nitride | CAS No. | 10043-11-5 | 20-30 |
| Proprietary Trade Secret | CAS No. | Mixture | 1-2 |

## 4. FIRST AID MEASURES

| | |
|---|---|
| **EYES** | Flush eyes, including under the eyelids, with large amounts of water. If irritation persists, seek medical attention. |
| **SKIN** | Wash thoroughly with mild soap and water. |
| **INGESTION** | Give copious amounts of water and seek medical attention. |
| **INHALATION** | Remove to fresh air. Seek medical attention if symptoms persist. |

## 5. FIRE FIGHTING MEASURES

| | |
|---|---|
| **Extinguishing Media** | This water-based refractory coating is non-combustible. Use extinguishing media appropriate to the surrounding fire. |
| **Flammability Classification** | Non-flammable. |
| **Special Hazards Arising from the Chemical** | None known. |
| **Hazardous Combustion Products** | None. |
| **Specific Protective Equipment and Precautions (Firefighters)** | As in any fire, wear self-contained breathing apparatus (SCBA), NIOSH (approved or equivalent) and full protective gear. |

## 6. ACCIDENTAL RELEASE MEASURES

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|---|---|
| **Personal Precautions, Protective Equipment and Emergency Procedures** | Clean up personnel should wear protective gloves and goggles to prevent possible irritation from prolonged contact. Contain the spill by using an absorbent material. |
| **Environmental Precautions** | Do not allow product to reach sewage system or any water course. |
| **Methods and Materials For Containment and Cleaning Up** | No special measures are required; refer to environmental and personal precautions, and other sections of this document. |

## 7. HANDLING AND STORAGE

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|---|---|
| **SAFE HANDLING PRECAUTIONS** | Boron Nitride is slippery, and is considered a slip hazard if spilt on a walkway. Practice good housekeeping. Note exposure controls and personal protection (section 8). |
| **SAFE STORAGE PRECAUTIONS** | Store in original container. |

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Limits/Guidelines**

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|---|---|
| **Engineering Measures/Controls** | Provide adequate ventilation to control dust or vapors below the regulated exposure limits (PEL and TLV). |
| **Personal Protective Equipment** | Protective clothing should be selected specifically for the workplace, depending on the concentration and quality of the hazardous substances handled. The chemical resistance of the protective gear should be inquired from the respective supplier. |
| **Respiratory** | An appropriate NIOSH-approved respirator must be worn if exposure is likely to exceed the lowest TLV/PEL rated regulations. |
| **Eye/Face** | Safety goggles or side-shielded safety glasses are recommended for any type of industrial handling. |
| **Hands** | Use impervious gloves. |
| **Skin/Body** | Normal work clothing. Note that long sleeved shirts, long pants and gloves are recommended. |

**Exposure Guidelines**

| | | |
|---|---|---|
| **Boron Nitride** | Guideline ACGIH (TLV): | None established (treat as nuisance dust)<br>10 $mg/m^3$ (Total dust)<br>5 $mg/m^3$ (Respirable fraction) |
| | Guideline OSHA (PEL): | None established (treat as nuisance dust)<br>15 $mg/m^3$ (Total dust) |

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| | | |
|---|---|---|
| | | 5 mg/m$^3$ (Respirable fraction) |
| **Proprietary Trade Secret** | Guideline ACGIH (TLV): | 0.02 mg/m$^3$ |
| | Guideline OSHA (PEL): | 0.1 mg/m$^3$ |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|---|---|---|---|
| **Physical State** | Liquid | **Odor** | None |
| **Color** | White | **Vapor Pressure** | 10-20 mmHg |
| **Specific Gravity** | 1.1 | **Vapor Density** | Greater than air (Air=1) |
| **pH** | 7-8 | **Solubility in Water** | Dilutable |
| **Viscosity** | 8-20 cps | **Freezing Point** | 0$^o$ C (32$^o$ F) |
| **Melting Point** | n. ap. | **Boiling Point** | 100$^o$ C (212$^o$ F) |
| **VOC Content** | 0 g/L | **Percent Volatile** | 75% -85% |
| **Molecular Weight** | n. ap. | **Flash Point** | n. ap. |
| **Evaporation Rate** | About that of water | **Flash Point Method** | n. ap. |

## 10. STABILITY AND REACTIVITY

| | |
|---|---|
| **Chemical Stability** | This water-based refractory coating is stable under all normal conditions of storage. Hazardous polymerization will not occur. |
| **Incompatible Materials** | None known, but as a good practice, do not mix with other chemicals. |
| **Conditions To Avoid** | None known. |
| **Hazardous Decomposition Products** | None. |

## 11. TOXICOLOGICAL INFORMATION

| | |
|---|---|
| **Route(s) Of Entry/Exposure** | Note all values are calculated in accordance with OSHA 29 C.F.R. § 1910 for mixtures. |
| **Ingestion** | $LD_{50}$ Oral - rat: >9000 mg/kg |
| **Skin Absorption** | $LD_{50}$ Dermal – rat: >2000 mg/kg |
| **Inhalation** | $LC_{50}$ Inhalation – rat (per 4 hours): >20 mg/L |
| **Eye Contact** | Irritant due to ceramic solids in the paint. |
| **Skin Contact** | None expected. |
| **Effects of Acute Exposure** | See section above for eye contact, skin contact, ingestion, and inhalation. |
| **Effects of Chronic Exposure** | CAUTION! Exposure to dust may be irritating to eyes, nose and throat. |
| **Exposure Limits** | |
| **NTP** | No ingredient of this product is present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed carcinogen by NTP. |
| **IARC** | No ingredient of this product is present at levels greater than or equal to |

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| | |
|---|---|
| | 0.1% is identified as a probable, possible, or confirmed carcinogen by OSHA. |
| **ACGIH** | No ingredient of this product is present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed carcinogen by ACGIH. |
| **OSHA** | No ingredient of this product is present at levels greater than or equal to 0.1% is identified as a probable, possible, or confirmed carcinogen by OSHA. |
| **Reproductive Effects** | No adverse effects. |
| **Further Information** | Quantitative data on this product is not available. No toxic effects are to be expected when this product is handled appropriately. |

## 12. ECOLOGICAL INFORMATION

| | |
|---|---|
| **Ecotoxicity** | Data is lacking and inconclusive for this product. |
| **Persistence/Degradability** | Data is lacking and inconclusive for this product. |
| **Bio Accumulative Potential** | Data is lacking and inconclusive for this product. |
| **Mobility in Soil** | Data is lacking and inconclusive for this product. |
| **Other Adverse Effects** | Data is lacking and inconclusive for this product. |

## 13. DISPOSAL CONSIDERATIONS

| | |
|---|---|
| **Description of Waste** | No data. |
| **Methods of Disposal** | Consult local/regional/national/international regulations for compliance. The liquid nature of this product may restrict disposal options. Non-contaminated paint may be returned to the manufacturer for proper disposal. The dried paint generally does not exhibit any characteristics of a hazardous waste. |

## 14. TRANSPORT INFORMATION

| | |
|---|---|
| **UN Number** | |
| **DOT, IMDG, IATA** | n. ap. |
| **Proper Shipping Name** | |
| **DOT, IMDG, IATA** | n. ap. |
| **Hazard Class(es)** | DOT – Not Regulated. |
| **DOT, IMDG, IATA** | ICAO/IATA – Not Dangerous or not hazardous goods not restricted for transport by air.<br>IMDG – Not Regulated |
| **Packaging Group** | DOT – Not Regulated |
| **DOT, IMDG, IATA** | ICAO/IATA – Not Dangerous or not hazardous goods not restricted for transport by air.<br>IMDG – Not Regulated |
| **Environmental Hazards** | |
| **DOT, IMDG, IATA** | n. ap. |
| **Special Precautions** | |

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**DOT, IMDG, IATA** n. ap.

## 15. OTHER REGULATORY INFORMATION

**California Proposition 65 Warnings** This product does not contain any material or ingredient that the State of California has found to cause cancer which would require a warning under the statute.

**TSCA Inventory** All substances contained in this product are listed in the Toxic Substances Control Act Chemical Substance Inventory.

**HMIS (USA)**

| | |
|---|---|
| HEALTH | **1** |
| FLAMMABILITY | **0** |
| REACTIVITY | **0** |
| PERSONAL PROTECTION | **E** |

**NFPA (USA)**

Health
Flammability
Reactivity
Specific Hazard

**Protective Equipment**

## 16. OTHER INFORMATION

**SDS Number:** 1123
**SDS Revision Number:** 2-1-0
**SDS Preparation or Revision Date:** May 1, 2017
**SDS Prepared By:** C. Holcombe
**Date Printed** May 1, 2017
**Telephone Number** 865-482-5717
**Abbreviations**

| | |
|---|---|
| **Not Available** | n. av. |
| **Not Applicable** | n. ap. |
| **DOT** | US Department of Transportation |
| **IATA** | International Air Transportation Association |
| **IMDG** | International Maritime Code for Dangerous Goods |
| **ICAO** | International Civilian Aviation Organization |
| **GHS** | Globally Harmonized System of Classification and Labeling of Chemicals |
| **CAS** | Chemical Abstract Service |
| **HMIS** | Hazardous Materials Identification System (US) |
| **NFPA** | National Fire Protection Association (US) |
| **LC50** | Lethal concentration, 50 percent |
| **LD50** | Lethal dose, 50 percent |
| **STOT** | Specific Target Organ Toxicity |

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|---|---|
| **RQ** | Reportable Quantity |
| **TPQ** | Threshold Planning Quantity |
| **CERCLA** | Comprehensive Environmental Response, Compensation and Liability Act |
| **SARA** | Superfund Amendments and Reauthorization Act |
| **TSCA** | Toxic Substances Control Act |
| **RTK** | Right to Know |
| **EPCRA** | Emergency Planning and Community Right to Know Act |
| **TLV** | Threshold Limit Values |
| **PEL** | Permissible Exposure Limits |

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