

Safety Data Sheet  
according to 29CFR1910/1200 and GHS Rev. 3  
Effective Date: 04.10.2024

**Avian-B Coating**

**SDS**

Avian-B coating pre-mix is a concentrate for the production of Avian-B coating. The pre-mix consists of analytically pure barium sulfate, binder, distilled water, and coating dispersant agents. Instructions for mixing and application should be followed closely to assure the best final product.



Avian Technologies LLC  
116 Newport Road, Carriage House  
New London NH 03257  
PO Box 716, Sunapee NH 03782  
603-526-2420  
[www.aviantechologies.com](http://www.aviantechologies.com)

Safety Data Sheet  
according to 29CFR1910/1200 and GHS Rev. 3  
Effective Date: 04.10.2024

**Safety Data Sheet**  
**Revision #8: 4/10/2024**  
**Avian B Pre-Mix Reflectance Coating**

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND OF THE SUPPLIER**

**Product Name:** Avian B Pre-Mix White Reflectance Coating

**Manufacturer/Supplier Trade Name:** Avian Technologies LLC

**Manufacturer Article Number:** Avian B

Recommended Uses of the product and restrictions on use:

Avian-B is a well characterized white reflective coating that has been used for diffuse reflectance applications for more than 20 years. The coating is highly lambertian and exhibits reflectance of >97% over from 350-850 nm and greater than 92% from 250-1300 nm. The coating is easily applied to most metal substrates and can be applied to other materials with proper surface preparation. The applied coating is stable from -40 degrees C to +90 degrees C. This coating is primarily designed for laboratory, as opposed to field, applications.

**Manufacturer and Supplier Details:** Avian Technologies LLC  
116 Newport Road  
Carriage House  
PO Box 92  
New London NH 03257

**Emergency Telephone Number:** 603-526-2420

**24 Hour Assistance:** For Emergency, Health, Safety and Environmental Information, call 1-800-424-9300 in the United States and 613-996-6666 in Canada. International: Call 1-703-527-3887

**SECTION 2: HAZARDS IDENTIFICATION**

**Emergency Overview:** As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes, and clothing.

**Classification of the substance:** Not classified for physical or health hazards under GHS.

**Hazard Statements:**

**Precautionary statements:**

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

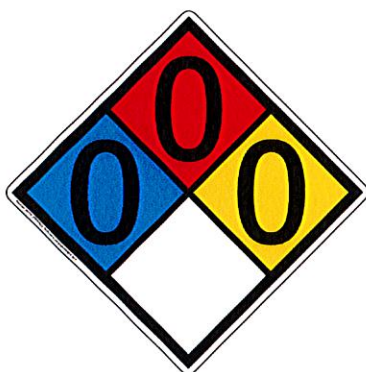
Do not eat, drink, or smoke when using this product.

Read material at [www.avianttechnologies.com/help](http://www.avianttechnologies.com/help) prior to use.

Safety Data Sheet  
according to 29CFR1910/1200 and GHS Rev. 3  
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Other Non-GHS Classification:

WHMIS  
NFPA/HMIS



HEALTH	0
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	X

NFPA Scale (0-4) HMIS Ratings (0-4)

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredient	CAS Number	Chemical Formula
Barium Sulfate	7727-43-7	BaSO <sub>4</sub>
Distilled Water	n/a	H <sub>2</sub> O
Polyvinyl Alcohol	9002-89-5	(-CH <sub>2</sub> CHOH-) <sub>n</sub>

**SECTION 4: FIRST AID MEASURES**

Description of First Aid Measures

*After inhalation:* Move exposed to fresh air. Loosen clothing as necessary. Give artificial respiration if necessary. If breathing is difficult, give oxygen. Get medical attention if cough or other symptoms appear.

*After skin contact:* Rinse/flush exposed area gently using soap and water for 15-20 minutes. Seek medical attention if discomfort or irritation persists.

*After eye contact:* Protect unexposed eye. Rinse/flush exposed eye(s) gently using water for 15-20 minutes. Remove contact lens(es) if able to do so during rinsing. Seek medical attention if irritation persists or if concerned.

*After swallowing:* Rinse mouth thoroughly with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if irritation, discomfort, or vomiting persists. Dilute with water.

Most important symptoms and effects, both acute and delayed.

Irritation, Shortness of breath, Headache, Nausea, Dizziness, Pneumoconiosis. Stomach irregularities.

Indication of any immediate medical attention and special treatment needed: If seeking medical attention, provide SDS to physician. Physician should treat symptomatically.

#### **SECTION 5: FIRE FIGHTING MEASURES**

##### Extinguishing Media

Suitable extinguishing agents: Use water, dry chemical, chemical foam, carbon dioxide or alcohol-resistant foam.

For safety reasons, unsuitable extinguishing agents: None

Special hazards arising from the substance: If liquid evaporates, combustible dust formation is a risk. Thermal decomposition can lead to the release of irritating gases and vapors.

Advice for firefighters: Wear protective eyewear, gloves, and clothing.

Additional information (precautions): Avoid dust generation. Avoid inhaling fumes, dust, or vapors. Avoid contact with eyes, skin and clothing.

#### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation.

Environmental precautions: Try to contain any spills for appropriate disposal.

Methods and materials for containment and cleanup: Wear protective clothing. Always obey local regulations. Containerize for disposal.

Reference to other sections: NA

#### **SECTION 7: HANDLING AND STORAGE**

Precautions for safe handling: Follow good hygiene procedures when handling chemical materials.

Conditions for safe storage: Product should be stored in brown bottles protected from light and in a cool, dry, ventilated area. Avoid conditions that would lead to dust formation.

#### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**



Safety Data Sheet  
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**Control Parameters:**

Based on Barium Sulfate

**Airborne Exposure Limits:**

OSHA Permissible Exposure Limit (PEL): 15mg/m<sup>3</sup> total dust, 5mg/m<sup>3</sup> respirable dust

ACGIH Threshold Limit Value (TLV): 10mg/m<sup>3</sup> (TWA)

Appropriate engineering controls: Ventilation System: In general, dilution is a satisfactory health hazard control for this substance. Local exhaust should be considered if conditions of use create discomfort for the user.

Respiratory protection: Personal Respirators (NIOSH Approved): If dust is present and exposure limits for dust are exceeded, a full-face piece particulate respirator (NIOSH Type N100 filters) may be worn. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Protection of skin: Wear protective gloves and clean body-covering clothing.

Eye Protection: Use chemical safety goggles. Maintain eye wash stations and quick drench facilities in the work area.

General hygienic measures: Perform routine housekeeping. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes, and clothing.

Before re-wearing, wash contaminated clothing.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Physical Data**

Appearance (physical state, color)	Thick white slurry	Explosion limit lower: Explosion limit upper:	
Odor		Vapor Pressure	Solids not volatile
Odor threshold		Vapor density	
pH value		Relative density	
Melting, freezing point		Solubilities	Insoluble
Boiling point		Partition coefficient	
Flash point	NA	Auto/self-ignition temperature	Information not available
Evaporation rate		Decomposition temperature	
Flammability		Viscosity	
Density			

**SECTION 10: STABILITY AND REACTIVITY**

Reactivity: Stable under ordinary conditions and proper storage. Chemical Stability:

Stable under ordinary conditions.

Possible Hazardous Reactions: Burning of barium sulfate may produce sulfur oxides. As an organic compound, polyvinyl alcohol will produce carbon monoxide under conditions that lead to incomplete combustion.

Conditions to avoid: Incompatible materials.

Incompatibilities: Aluminum (can be used as substrate surface), phosphorus, strong oxidizers

Hazardous decomposition products: Sulfur oxides, barium oxide

Safety Data Sheet  
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**SECTION 11: TOXICOLOGICAL INFORMATION**

Acute toxicity: No additional information.  
Chronic toxicity: No additional information  
Corrosion irritation: No additional information  
Sensitization: No additional information  
Single target organ (STOT): No additional information  
Numerical measures: No additional information  
Carcinogenicity: No additional information  
Mutagenicity: No additional information  
Reproductive toxicity: No additional information

**SECTION 12: ECOLOGICAL INFORMATION**

Ecotoxicity Persistence and degradability: Barium sulfate may accumulate to some extent.  
Bioaccumulative potential: See above  
Motility in soil:  
Other adverse effects:

**SECTION 13: DISPOSAL CONSIDERATIONS**

Waste disposal recommendations: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements.

**SECTION 14: TRANSPORTATION INFORMATION**

UN-Number: Not regulated  
UN proper shipping name: Not regulated  
Transport hazard class(es):  
Packing group: Not regulated  
Environmental hazard:  
Transport in bulk:  
Special precautions for users: None

**SECTION 15: REGULATORY INFORMATION**

United States (USA)  
SARA Section 311/312 (Specific toxic chemical listings)  
Barium sulfate listed as chronic  
  
SARA Section 313 (Specific toxic chemical listings)  
None of the ingredients is listed.  
  
RCRA (hazardous waste code)  
None of the ingredients is listed.  
  
TSCA (Toxic Substances Control Act)  
None of the ingredients is listed.

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Proposition 65 (California)

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Canada

Canadian Domestic Substances List (DSL):

All ingredients are listed.

Canadian NPRU Ingredient Disclosure list (limit 0.1%)

None of the ingredients is listed.

Canadian NPRI Ingredient Disclosure list (limit 1%)

None of the ingredients is listed.

**SECTION 16: OTHER INFORMATION**

Avian Technologies LLC provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving this information must exercise their independent judgment in determining its appropriateness for a particular purpose. Avian Technologies LLC makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, Avian Technologies LLC will not be responsible for damages resulting from use of or reliance upon this information.

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