

Safety Data Sheet
Revision #5: 7/28/2015
Avian B Pre-Mix Reflectance Coating

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. For all other purposes, call 603-5262420.

SECTION I PRODUCT IDENTIFICATION

Product Name: Avian-B Premix Reflectance Coating
 DOT Shipping Name: Same
 DOT Hazard Class: Not a hazardous material per CFR49 172.101
 Hazard Rating: Health: 1; Flammability: 0; Reactivity: 1
 Protective Equipment: Safety Glasses, Gloves, Ventilation
 Precautionary Label: Keep away from sparks and flame. Use with adequate ventilation.

SECTION II 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.

Substance	Barium Sulfate	Polyvinyl Alcohol
Health Rating	1-Slight (associated with dust if dry)	0-None
Flammability Rating	0-None	2-Moderate
Reactivity Rating	1-Slight	0-None
Contact Rating	1-Slight	0-None
Lab Protective Equipment	Goggles, Lab Coat, Proper Gloves	Goggles, Lab Coat, Class B Extinguisher
Storage Color Code	Green (General)	Red (Flammable)
Storage Code for Avian B	Product as shipped: Keep in dark (store in brown bottle) General (contains water)	

Potential Health Effects

Substance	Barium Sulfate	Polyvinyl Alcohol
Inhalation	Not expected to be a health hazard	If allowed to dry out-small potential of nuisance dust. If heated above 200C, fumes irritating eyes, nose, and throat may be evolved. Symptoms would include tears in the eyes with itching, redness, burning in throat and nose.
Ingestion	Not expected to be a health hazard.	Not expected to be a health hazard via ingestion.
Skin Contact	No adverse effects expected	Not expected to be a health hazard from skin exposure
Eye Contact	No adverse effects expected.	Mechanical irritation only if dry.
Chronic Exposure	When allowed to dry (not advisable), long-term inhalation of dust may lead to deposition in the lungs in sufficient quantities to produce baritosis-a benign pneumoconiosis. This produces a radiological picture even though symptoms and abnormal signs may not be present.	No human data. Animal studies showed a drop in hemoglobin and erythrocyte (red blood cell) number with eventual complete coagulation inhibition. Some animal studies also noted possibility of carcinogenicity.
Aggravation of Preexisting conditions	No information found.	No information found.

SECTION III COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Mol. Wt.	Chemical Formula	Occ. Exp. Limit Pv (mmHg)	Hazardous
Barium Sulfate	7727-43-7	233.39	BaSO ₄	n/a	Yes
Distilled Water	n/a	18.02	H ₂ O	n/a	No
Polyvinyl Alcohol	9002-89-5		(-CH ₂ CHOH-) _n	Negligible	Yes

PHYSICAL DATA

Appearance: White paste or a combination of white paste and colorless liquid (distilled water) Melting

Point: 428°F

Percent volatiles by volume: Solids are not volatile-Material contains water

Evaporation Rate: Information not available

Water solubility: Binder Appreciable; Pigment Not Appreciable

Flash Point: Not applicable

Auto Ignition Temperature: Information not available

SECTION IV FIRST AID MEASURES

Inhalation: Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion: Give several glasses of water to drink to dilute. In large amounts were swallowed, get medical advice.

Skin Contact: Wash exposed area with soap and water. Get medical advice if irritation develops. Eye

Contact: Wash thoroughly with running water. Get medical advice if irritation develops.

SECTION V FIRE FIGHTING MEASURES

Fire: Not expected to be a fire hazard. Component polyvinyl alcohol has a flash point of 79C and fire is possible at elevated temperatures if material becomes dry.

Explosion: Not considered to be an explosion hazard. Polyvinyl alcohol can be hazard is fine dust is dispersed in air in sufficient concentration. This is unlikely if product is properly stored and kept moist.

Special Information: In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode.

SECTION VI: ACCIDENTAL RELEASE MEASURES

Ventilate area or leak or spill. Remove sources of ignition. Wear appropriate personal protective equipment as specified in Section VIII. Clean up spills prior to material drying. If material does become dry, clean up in a manner that does not disperse dust into the air. Use wet sweeping and non-sparking tools and equipment. Pick up spill for recovery or disposal and place in a closed container.

SECTION VII: HANDLING AND 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 VIII: EXPOSURE CONTROLS/PERSONAL PROTECTION

Based on Barium Sulfate Airborne

Exposure Limits:

OSHA Permissible Exposure Limit (PEL): 15mg/m³ total dust, 5mg/m³ respirable dust

ACGIH Threshold Limit Value (TLV): 10mg/m³ (TWA)

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.

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.

Skin Protection: 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.

SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Product is sold as a slurry in water. Thick, white liquid.

Odor: Odorless

Solubility: Not soluble in water. pH:
 Neutral in water.
 Boiling Point: Barium sulfate decomposed at temperatures over 1600C.
 Vapor Density: No information found.
 Vapor Pressure: No information found.
 Evaporation Rate: No information found.

SECTION X STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions and proper storage. Store in dark in brown bottles and avoid temperature extremes.
 Hazardous Decomposition Products: 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.
 Hazardous Polymerization: Will not occur.
 Incompatibilities: Aluminum, phosphorus, strong oxidizers
 Conditions to avoid: Do not let product dry out.

SECTION XI TOXICOLOGICAL INFORMATION

Material	Barium Sulfate	Polyvinyl Alcohol
LD50/LC50	No information found related to normal routes of occupational exposure	Over 20gm/kg. Investigated as a tumorigen.
NTP Carcinogen	Known: No Anticipated: No	Known: No Anticipated: No
IARC Category	None	3

SECTION XII ECOLOGICAL INFORMATION

Ecological Fate: Barium sulfate may accumulate to some extent.
 Environmental Toxicity: None found.

SECTION XIII DISPOSAL CONSIDERATIONS

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 XIV TRANSPORTATION INFORMATION

Not regulated

SECTION XV REGULATORY INFORMATION

---/Chemical Inventory Status-Part 1/-----

Ingredient	TSCA	EC	Japan	Australia
Barium sulfate (7727-43-7)	Yes	Yes	Yes	Yes
Polyvinyl alcohol (9002-89-5)	Yes	No	Yes	Yes

---/Chemical Inventory Status-Part 2/-----

Ingredient	Korea	Canada		Phil.
		DSL	NDSL	
Barium sulfate (7727-43-7)	Yes	Yes	No	Yes
Polyvinyl alcohol (9002-89-5)	Yes	Yes	No	Yes

-----/Federal, State, and International Regulations-Part 1/-----

Ingredient	- SARA 302-		-----SARA 313-----	
	RQ	TPQ	List	Chemical Ctg.
Barium sulfate (7727-43-7)	No	No	No	No

Polyvinyl alcohol (9002-89-5) No No No No

-----Federal, State, and International Regulations-Part 2-----

Ingredient	CERCLA	261.33	RCRA	8(d)	TSCA
Barium sulfate (7727-43-7)	5000		U154		No
Polyvinyl alcohol (9002-89-5)	No		No		No

Chemical Weapons Convention: No
TSCA 12(b): No
CDTA: No
SARA 311/312: Acute: Yes; Chronic: No; Fire: No; Pressure: No
Reactivity: No

Australian Hazchem Code: None allocated.

Poison Schedule: None allocated.

WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

SECTION XVI OTHER INFORMATION

NFPA Ratings: Health: 0; Flammability: 0; Reactivity: 0 Label

Hazard Warning:

As part of good industrial and personal hygiene and safety procedures, avoid all unnecessary exposure to the chemical substance and ensure proper removal from skin, eyes, and clothing.

Label Precautions: None

Label First Aid: None

Product Use: Coating

Revision Information: July 28, 2015 Update to standardized format.

Disclaimer:

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