

**BIO BASIC INC.**  
20 KONRAD CRES, MARKHAM ONTARIO L3R 8T4 CANADA  
TEL: (905) 474 4493, (800) 313 7224 FAX: (905) 474 5794

MATERIAL SAFETY DATA SHEET  
REQUIRED UNDER SAFETY AND HEALTH REGULATION FOR SHIP REPAIRING

MANUFACTURER'S NAME: BIO BASIC INC.  
TEL: (905) 474 4493  
FAX: (905) 474 5794  
FOR CHEMICAL EMERGENCY: (416) 995 9730  
ADDRESS: 20 KONRAD CRES, MARKHAM ONTARIO L3R 8T4 CANADA

DATE UPDATED: OCT 20, 2014

**SECTION 1. ----- CHEMICAL IDENTIFICATION -----**

**Product Name** Albumin, Bovine, Salt free pH5.1 ±0.2  
**Product Code(s)** D0024  
**Recommended Use** For Further Manufacturing Use Only  
Not for Human or Animal Drug Use  
**Recommended Use** Nuclease and protease-free powder, suitable for use in most molecular biology applications.  
**Synonyms** Albumin Bovine (pH 5.1 ±0.2)

**SECTION 2. ----- HAZARDS IDENTIFICATION -----**

**Classification** Not classified as a hazard

**SECTION 3. ----- COMPOSITION/INFORMATION ON INGREDIENTS -----**

Chemical Name	EC No.	REACH Reg. No.	CAS-No	Weight %	Classification
Serum albumin	EEC No. 232-936-2	Not available	9048-46-8	95-100	-

**SECTION 4. ----- FIRST-AID MEASURES -----**

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician  
**Skin Contact** Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes  
**Inhalation** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.  
**Ingestion** Clean mouth with water and afterwards drink plenty of water  
**Notes to Physician** Treat symptomatically

**SECTION 5. ----- FIRE FIGHTING MEASURES -----**

<b>Flammable Properties</b>	Not flammable
<b>Flash Point</b>	Not determined
<b>Suitable Extinguishing Media</b>	Dry chemical, CO2, water spray or regular foam.
<b>Hazardous Combustion Products</b>	No information available.
<b><u>Explosion Data</u></b>	
<b>Sensitivity to Mechanical Impact</b>	Not sensitive
<b>Sensitivity to Static Discharge</b>	Not sensitive
<b>Protective Equipment and Precautions for Firefighters</b>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**SECTION 6. ----- ACCIDENTAL RELEASE MEASURES-----**

<b>Personal Precautions</b>	Avoid contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate ventilation
<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so
<b>Methods for Cleaning Up</b>	Avoid dust formation. Pick up and transfer to properly labeled containers. Ventilate area and wash spill site after material pickup is complete.

**SECTION 7. ----- HANDLING AND STORAGE-----**

<b>Handling</b>	Handle in accordance with good industrial hygiene and safety practice.
<b>Storage</b>	Keep containers tightly closed in a dry, cool and well-ventilated place
<b>Incompatible Products</b>	Strong oxidizing agents.

**SECTION 8. ----- EXPOSURE CONTROLS/PERSONAL PROTECTION-----**

<b>Chemical Name</b>	<b>ACGIH TLV</b>	<b>OSHA PEL</b>	<b>NIOSH IDLH</b>
Serum albumin 9048-46-8			

<b>Engineering Measures</b>	Showers Eyewash stations Ventilation systems
<b><u>Personal Protective Equipment</u></b>	
<b>Eye/Face Protection</b>	Safety glasses with side-shields.
<b>Skin and Body Protection</b>	Wear protective gloves/clothing.
<b>Respiratory Protection</b>	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be

required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice

**SECTION 9. - - - - - PHYSICAL AND CHEMICAL PROPERTIES - - - - -**

<b>Appearance</b>	Off-White to beige
<b>Odor</b>	No information available
<b>Odor Threshold</b>	No information available
<b>Decomposition Temperature °C</b>	No information available
<b>Freezing Point</b>	No information available
<b>Initial Boiling Point</b>	No information available
<b>Physical State</b>	Lyophilized Powder
<b>pH</b>	No data available
<b>Flash Point</b>	Not determined
<b>Autoignition Temperature</b>	No data available
<b>Boiling Point/Range</b>	No data available
<b>Melting Point/Range</b>	No data available
<b>Flammability Limits in Air</b>	<b>Upper</b> No data available <b>Lower</b> No data available
<b>Explosive Properties</b>	No information available
<b>Oxidizing Properties</b>	No information available
<b>Evaporation Rate</b>	No data available
<b>MMHG @ 37.8 C</b>	No data available
<b>Vapor Density</b>	No data available
<b>Specific Gravity</b>	No data available
<b>Solubility</b>	No information available
<b>Partition Coefficient (n-octanol/water)</b>	No data available
<b>Viscosity</b>	No information available

**SECTION 10. - - - - - STABILITY AND REACTIVITY - - - - -**

<b>Stability</b>	Stable under recommended storage conditions
<b>Incompatible Products</b>	Strong oxidizing agents.
<b>Conditions to Avoid</b>	None known based on information supplied
<b>Hazardous Decomposition Products</b>	No information available.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur

**SECTION 11. - - - - - TOXICOLOGICAL INFORMATION - - - - -**

**Acute Toxicity**

**Product Information** Product does not present an acute toxicity hazard based on known or supplied information

**Chronic Toxicity**

**Chronic Toxicity** No known effect based on information supplied

**Target Organ Effects** None known.

**SECTION 12. ----- ECOLOGICAL INFORMATION -----**

**Ecotoxicity**

The environmental impact of this product has not been fully investigated

**SECTION 13. ----- DISPOSAL CONSIDERATIONS -----**

**Waste Disposal Method** Dispose of material in accordance with all federal, state, and local regulations

**Contaminated Packaging** Dispose of in accordance with all federal, state and local regulations

**SECTION 14. ----- TRANSPORT INFORMATION -----**

**IATA** Not regulated

**DOT** Not regulated

**SECTION 15. ----- REGULATORY INFORMATION -----**

**REACH Title VII Restrictions** No information available.

<b>Chemical Name</b>	<b>Dangerous Substances</b>	<b>Organic Solvents</b>	<b>Harmful Substances Whose Names Are to be Indicated on the Label</b>	<b>Pollution Release and Transfer Registry (Class II):</b>	<b>Pollution Release and Transfer Registry (Class I):</b>	<b>Poison and Deleterious Substances Control Law:</b>
Serum albumin	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

<b>Component</b>	<b>ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying</b>	<b>ISHA - Harmful Substances Requiring Permission</b>	<b>Toxic Chemical Classification Listing (TCCL) - Toxic Chemicals</b>	<b>Toxic Release Inventory (TRI) - Group I</b>	<b>Toxic Release Inventory (TRI) - Group II</b>
Serum albumin 9048-46-8 ( 95-100 )	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

**International Inventories**

**TSCA** Complies  
**EINECS/ELINCS** Complies  
**ENCS** Does not Comply

IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

### **U.S. Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

#### **SARA 311/312 Hazard Categories**

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

#### **Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### **Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990

#### **CERCLA**

### **U.S. State Regulations**

#### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

### **International Regulations**

**Mexico - Grade** No information available.

**Canada**

#### **WHMIS Hazard Class**

Not determined

### **SECTION 16. ----- OTHER INFORMATION -----**

<b>Issuing Date</b>	13-Aug-2009
<b>Revision Date</b>	20-Oct-2014

**Revision Note** No information available.

**Recommended Restrictions** No information available

**Disclaimer**

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**



## CERTIFICATE OF ANALYSIS

---

Product	Albumin, PH5.1±0.2
Grade	Biotech
Product Code	D0024
Formula	N/A
MW	N/A
Source	from bovine
CAS#	9048-46-8
Lot No	

---

---

Test Items	Specifications	Results
<b>Microbiological Testing</b>		
Microbial Growth	Not Detected	
<b>Viral Testing (Modified 9 CFR 113.53c)</b>		
Extraneous Viruses (FAb)		
Bluetongue Virus	Not Detected	
Vesicular Stomatitis Virus	Not Detected	
<b>Physical Testing</b>		
pH @ RT, 10% Solution	4.9-5.2	
Conductivity, 10% Solution	≤2,200 μS	
<b>Biochemical Testing</b>		
Purity (HPLC)	≥98%	

---

Note: Filtered through a 0.2 μm filter before lyophilizing.

Storage: 4°C.