

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 12/04/2014 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking **Product identifier** 1.1. : BOVINE SERUM ALBUMIN Trade name CAS No : 9048-46-8 Product code AB00440 Relevant identified uses of the substance or mixture and uses advised against 1.2. Use of the substance/mixture : Laboratory use/Manufacturing component/Reseearch Use of the substance/mixture : Chemical substance for research 1.3. Details of the supplier of the safety data sheet AmericanBio, Inc. 15 Erie Dr. Natick, MA 01760 - USA T 800.443.0600 - F 508.655.2754 info@americanbio.com - www.americanbio.com 1.4. **Emergency telephone number** Emergency number : 855.835.2572 (U.S.) :: 760.602.8703 (Outside U.S.) **SECTION 2: Hazards identification Classification of the substance or mixture** 2.1. **Classification (GHS-US)** Not classified 2.2. Label elements **GHS-US** labeling No labeling applicable 2.3. **Other hazards** No additional information available 2.4. Unknown acute toxicity (GHS-US) No data available SECTION 3: Composition/information on ingredients 3.1. **Substance** Name **Product identifier** % **Classification (GHS-US) BOVINE SERUM ALBUMIN** 100 Not classified (CAS No) 9048-46-8 (Main constituent) Full text of H-phrases: see section 16 3.2. **Mixture** Not applicable SECTION 4: First aid measures **Description of first aid measures** 4.1. : If you feel unwell, seek medical advice. Never give anything by mouth to an unconscious person. First-aid measures general If you feel unwell, seek medical advice (show the label where possible). First-aid measures after inhalation : Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. Assure fresh air breathing. Allow the victim to rest. First-aid measures after skin contact Rinse with water. Soap may be used. Take victim to a doctor if irritation persists. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Rinse with water. Take victim to an ophthalmologist if irritation persists. Rinse immediately with First-aid measures after eye contact plenty of water. Obtain medical attention if pain, blinking or redness persist.

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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations First-aid measures after ingestion Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Call Poison : Information Centre (www.big.be/antigif.htm). Consult a doctor/medical service if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. 4.2. Most important symptoms and effects, both acute and delayed Symptoms/injuries : Unlikely to cause harmful effects. Not expected to present a significant hazard under anticipated conditions of normal use. 4.3. Indication of any immediate medical attention and special treatment needed No additional information available SECTION 5: Firefighting measures **Extinguishing media** 5.1. Water spray, Polyvalent foam, ABC powder, Carbon dioxide, Foam, Dry powder, Carbon dioxide, suitable extinguishing media Water spray. Sand. Unsuitable extinguishing media : No unsuitable extinguishing media known. Do not use a heavy water stream. Special hazards arising from the substance or mixture 5.2 : DIRECT FIRE HAZARD. No data available on direct fire hazard. INDIRECT FIRE HAZARD. No Fire hazard data available on indirect fire hazard. : DIRECT EXPLOSION HAZARD. No data available on direct explosion hazard. INDIRECT Explosion hazard EXPLOSION HAZARD. No data available on indirect explosion hazard. Reactivity On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide carbon dioxide). Advice for firefighters 53 Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows. Dilute toxic gases with water spray. Use water spray or fog for cooling exposed containers. **Firefighting instructions** Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment. Heat/fire exposure: compressed air/oxygen apparatus. Do not enter fire area without proper Protection during firefighting protective equipment, including respiratory protection. SECTION 6: Accidental release measures Personal precautions, protective equipment and emergency procedures 6.1. 6.1.1. For non-emergency personnel Protective equipment : Gloves. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Mark the danger area. Prevent dust cloud formation, e.g. by wetting. No naked flames. Wash Emergency procedures contaminated clothes. Evacuate unnecessary personnel. Measures in case of dust release In case of dust production: keep upwind. Dust production: have neighbourhood close doors and windows. 6.1.2. For emergency responders Protective equipment : Equip cleanup crew with proper protection. Ventilate area. Emergency procedures 6.2. **Environmental precautions** 

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3.	Methods and material for containment and cleaning up	
For con	tainment	: Contain released substance, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.
Methods for cleaning up		: Stop dust cloud by humidifying. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling. On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.
6.4.	Reference to other sections	

See Heading 8. Exposure controls and personal protection.

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SECTION 7: Handling and storage		
7.1. Precautions for safe handling		
Precautions for safe handling	: Comply with the legal requirements. Clean contaminated clothing. Avoid raising dust. Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor.	
7.2. Conditions for safe storage, inc	cluding any incompatibilities	
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Direct sunlight. Keep container closed when not in use.	
Incompatible products	: Strong bases. strong acids.	
Incompatible materials	: Sources of ignition. Direct sunlight.	
Heat-ignition	: KEEP SUBSTANCE AWAY FROM: heat sources.	
Prohibitions on mixed storage	: KEEP SUBSTANCE AWAY FROM: oxidizing agents.	
Storage area	: Store in a dry area. Keep container in a well-ventilated place. Meet the legal requirements.	
Special rules on packaging	: SPECIAL REQUIREMENTS: closing. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.	
Packaging materials	: SUITABLE MATERIAL: No data available. MATERIAL TO AVOID: No data available.	
7.3. Specific end use(s)		

No additional information available

### SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

Personal protective equipment	: Avoid all unnecessary exposure.
Materials for protective clothing	: GIVE EXCELLENT RESISTANCE: No data available. GIVE GOOD RESISTANCE: No data available. GIVE LESS RESISTANCE: No data available. GIVE POOR RESISTANCE: No data available.
Hand protection	: Gloves. Wear protective gloves.
Eye protection	: Safety glasses. Chemical goggles or safety glasses.
Skin and body protection	: Protective clothing.
Respiratory protection	: Dust production: dust mask with filter type P1. Wear approved mask.
Other information	: When using, do not eat, drink or smoke.

### SECTION 9: Physical and chemical properties

9.1. Information on basic physical and	chemical properties
Physical state	: Solid
Appearance	: Crystalline powder.
Color	: White to light yellow.
Odor	: Mild odour.
Odor threshold	: No data available
рН	: No data available
pH solution	: 6-8
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available

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Relative density	: No data available
Solubility	: Poorly soluble in water. Water: > 30 %
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

#### 9.2. **Other information**

#### No additional information available

SECTION 10, Stobility and repotivity		
SECTION 10: Stability and reactivity 10.1. Reactivity		
	s/vapours (nitrous vapours, carbon monoxide - carbon dioxide).	
	svapours (nicious vapours, carbon monoxide - carbon dioxide).	
10.2. Chemical stability		
No data available. Not established.		
10.3. Possibility of hazardous reactions		
Not established.		
10.4. Conditions to avoid		
Direct sunlight. Extremely high or low temperatures.		
10.5. Incompatible materials		
strong acids. Strong bases.		
10.6. Hazardous decomposition products	3	
fume. Carbon monoxide. Carbon dioxide.		
<b>SECTION 11: Toxicological informat</b>	ion	
11.1. Information on toxicological effects		
Acute toxicity	: Not classified	
Skin corrosion/irritation	: Not classified	
Serious eye damage/irritation	: Not classified	
Respiratory or skin sensitization	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
Specific target organ toxicity (single exposure)	: Not classified	
Specific target organ toxicity (repeated exposure)	: Not classified	
Aspiration hazard	: Not classified	
Potential Adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.	

SECTION 12: Ecological information			
12.1. Toxicity			
Ecology - air	: Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009).		
Ecology - water	: Severe water pollutant (surface water). No data available on ecotoxicity.		
12.2. Persistence and degradability			

BOVINE SERUM ALBUMIN (9048-46-8)		
Persistence and degradability	Biodegradability in water: no data available. Not established.	
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12.3. Bioaccumulative potential		
BOVINE SERUM ALBUMIN (9048-46-8)		
Bioaccumulative potential	No bioaccumulation data available. Not established.	
12.4. Mobility in soil		
No additional information available		
12.5. Other adverse effects		
	: Avoid release to the environment.	
SECTION 13: Disposal considerations		
13.1. Waste treatment methods		
	: Remove to an authorized waste treatment plant. Dispose in a safe manner in accordance with local/national regulations.	
Additional information	: LWCA (the Netherlands): KGA category 03. Can be considered as non hazardous waste according to Directive 2008/98/EC.	
Ecology - waste materials	: Avoid release to the environment.	
SECTION 14: Transport information		
In accordance with DOT		
No dangerous good in sense of transport regulation	ons	
Additional information		
Other information	: No supplementary information available.	
ADR		
Transport document description	: UN N/A	
Packing group (ADR)	: N/A	
	: N/A	
Classification code (ADR)	: N/A	
Transport by sea No additional information available		
Air transport		
No additional information available		
<b>SECTION 15: Regulatory information</b>		
15.1. US Federal regulations		
BOVINE SERUM ALBUMIN (9048-46-8)		
Not listed on the United States TSCA (Toxic Sub	ostances Control Act) inventory	
15.2 International regulations		
15.2. International regulations		
CANADA No additional information available		
no auditional information available		
EU-Regulations		
No additional information available		
Classifier according to Degulation (EC) No. 4270/2000 [CI D]		
Classification according to Regulation (EC) No. 1272/2008 [CLP] Not classified		
INUL GIASSIIIEU		
Classification appording to Directive 67/549/55	C or 1000//E/EC	
Classification according to Directive 67/548/EE Not classified	C 01 1333/40/EC	
15.2.2. National regulations		
No additional information available		
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#### 15.3. US State regulations

No additional information available

### **SECTION 16: Other information**

Other information

: None.

SDS US (GHS HazCom 2012)

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