Safety Data Sheet
according to 29CFR1910/1200 and GHS Rev. 3

Effective date : 12.14.2014

SECTION 1 : Identification of the substance/mixture and of the supplier

Product name : Albumin,

Manufacturer/Supplier Trade name:

Manufacturer/Supplier Article number: S25132B

Recommended uses of the product and uses restrictions on use:

Manufacturer Details:
- AquaPhoenix Scientific
- 9 Barnhart Drive, Hanover, PA 17331

Supplier Details:
- Fisher Science Education
- 15 Jet View Drive, Rochester, NY 14624

Emergency telephone number:
- Fisher Science Education    Emergency Telephone No.: 800-535-5053

SECTION 2 : Hazards identification

Classification of the substance or mixture:

Health hazard

Respiratory sensitisation (Category 1), H334

Signal word :Danger

Hazard statements:
- May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements:
- If medical advice is needed, have product container or label at hand
- Keep out of reach of children
- Read label before use
- Avoid breathing dust/fume/gas/mist/vapours/spray
- In case of inadequate ventilation wear respiratory protection
- IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
- If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician
- Dispose of contents and container to an approved waste disposal plant

Combustible Dust Hazard: :
- May form combustible dust concentrations in air (during processing).

Other Non-GHS Classification:

WHMIS
NFPA/HMIS

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SECTION 3 : Composition/information on ingredients

Ingredients:

<table>
<thead>
<tr>
<th>CAS 9006-50-2</th>
<th>Albumin egg</th>
<th>100 %</th>
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Percentages are by weight

SECTION 4 : First aid measures

Description of first aid measures

After inhalation: Move exposed individual to fresh air. Loosen clothing as necessary and position individual in a comfortable position. Seek medical advice if discomfort or irritation persists. If breathing is difficult give oxygen. Give artificial respiration if necessary.

After skin contact: Wash affected area with soap and water. Rinse thoroughly. Seek medical attention if irritation, discomfort or vomiting persists. Flush with water for 15 minutes.

After eye contact: Protect unexposed eye. If able remove contact lens(es) while rinsing. Immediately flush exposed eye(s) gently using water for 15-20 minutes. Immediately get medical assistance if irritation persists or if concerned.

After swallowing: Rinse mouth thoroughly. Do not induce vomiting. Dilute with water or milk. Get medical assistance.

Most important symptoms and effects, both acute and delayed:

- Irritation.
- Nausea.
- Headache.
- Shortness of breath;

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Notes to Physician: Treat symptomatically.

SECTION 5 : Firefighting measures

Extinguishing media

Suitable extinguishing agents: If in laboratory setting follow laboratory fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. Use water, dry chemical, chemical foam, or alcohol-resistant foam.

For safety reasons unsuitable extinguishing agents:

Special hazards arising from the substance or mixture:

Advice for firefighters:

Protective equipment: Ensure adequate ventilation. Ensure eyewash and safety showers are available. Avoid contact with skin, eyes, and clothing. Use NIOSH-approved respiratory protection or breathing apparatus.

Additional information (precautions):
SECTION 6 : Accidental release measures

Personal precautions, protective equipment and emergency procedures:
Wear protective equipment. Vacuum or sweep up material. Clean up spills immediately. Keep unprotected persons away. Ensure adequate ventilation. Stop the spill, if possible. Avoid contact with skin, eyes, and clothing.

Environmental precautions:

Methods and material for containment and cleaning up:
Avoid dispersal of dust in the air. Do not clear dust on surfaces with compressed air. Place into properly labeled containers for recovery or disposal. If in a laboratory setting follow Chemical Hygiene Plan. If necessary use trained response staff or contractor. Dust deposits should not be allowed to accumulate on surfaces. Dust may form an explosive mixture if sufficient concentration is released into the atmosphere.

Reference to other sections:

SECTION 7 : Handling and storage

Precautions for safe handling:
Wash hands after handling. Avoid ingestion and inhalation. Follow good hygiene procedures when handling chemical materials. Avoid contact with eyes, skin, and clothing.

Conditions for safe storage, including any incompatibilities:
Store away from oxidizing agents.

SECTION 8 : Exposure controls/personal protection

Control Parameters: 9006-50-2, Albumin egg, ACGIH TLV

Appropriate Engineering controls:
Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

Respiratory protection:
Normal ventilation is adequate.

Protection of skin:
Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation.

Eye protection:
Safety glasses with side shields or goggles.

General hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin. Keep away from food, beverages, and feed sources. Do not inhale gases, fumes, dust, mist, vapor, and aerosols.

SECTION 9 : Physical and chemical properties
### Appearance (physical state, color):
- Yellow solid

### Explosion limit lower:
- Non Explosive

### Explosion limit upper:
- Non Explosive

### Odor:
- Odorless

### Vapor pressure:
- Not Applicable

### Odor threshold:
- Not Applicable

### pH-value:
- Not Applicable

### Melting/Freezing point:
- Not determined

### Solubilities:
- Insoluble in water

### Boiling point/Boiling range:
- Not determined

### Partition coefficient (n-octanol/water):
- Not Applicable

### Flash point (closed cup):
- Not Applicable

### Auto/Self-ignition temperature:
- Not Applicable

### Evaporation rate:
- Not Applicable

### Decomposition temperature:
- Not determined

### Flammability (solid, gaseous):
- Not Applicable

### Viscosity:
- Not Applicable
  - a. Kinematic: Not Applicable
  - b. Dynamic: Not Applicable

### Density:
- Not Applicable

### SECTION 10: Stability and reactivity

**Reactivity:**
- **Chemical stability:** No decomposition if used and stored according to specifications.
- **Possible hazardous reactions:**
- **Conditions to avoid:** Incompatible materials.
- **Incompatible materials:** Strong oxidizers.
- **Hazardous decomposition products:** Carbon oxides (CO, CO2). Nitrogen oxides (NO, NO2).

### SECTION 11: Toxicological information

**Acute Toxicity:**
- **Oral:**
  - LD50 Oral - Mouse: > 24,000 mg/kg
  - LD50 oral-rat: 101g/kg

**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:**
- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

**Mutagenicity:** No additional information.

**Reproductive Toxicity:** No additional information.
SECTION 12: Ecological information

Ecotoxicity Persistence and degradability: Not Determined.
Bioaccumulative potential: Readily biodegradable.
Mobility in soil: Not Determined
Other adverse effects: Not Determined.

SECTION 13: Disposal considerations

Waste disposal recommendations:
It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Dilute with water and flush to sewer. Consult federal, state, provincial, and local regulations regarding the proper disposal of waste material that may incorporate some amount of this product.

SECTION 14: Transport information

UN-Number
Not Regulated.
UN proper shipping name
Not Regulated.
Transport hazard class(es)
Not Regulated.
Packing group: Not Regulated.
Environmental hazard:
Transport in bulk:
Special precautions for user:

SECTION 15: Regulatory information

United States (USA)
SARA Section 311/312 (Specific toxic chemical listings):
Acute
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):
9006-50-2 Albumin, ACS Grade
CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):
None of the ingredients is listed

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 NPRI 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

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**SECTION 16 : Other information**

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

**GHS Full Text Phrases:**

**Abbreviations and acronyms:**

IMDG: International Maritime Code for Dangerous Goods
PNEC: Predicted No-Effect Concentration (REACH)
CFR: Code of Federal Regulations (USA)
SARA: Superfund Amendments and Reauthorization Act (USA)
RCRA: Resource Conservation and Recovery Act (USA)
TSCA: Toxic Substances Control Act (USA)
NPRI: National Pollutant Release Inventory (Canada)
DOT: US Department of Transportation
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstracts Service (division of the American Chemical Society)
NFPA: National Fire Protection Association (USA)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
DNEL: Derived No-Effect Level (REACH)

**Last updated** : 03.19.2015