1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 **Product Identifier**

Product Name Bovine Serum Albumin Heat Shock, Reagent Grade Powder, pH 7.0

Catalogue Number EQBAH64
Synonyms BSA
CAS Number 9048-46-8

CAS Number 9048-46-8
REACH Registration Not applicable

1.2 Relevant identified uses of the substances or mixture and uses advised against

Identified Use Laboratory reagent Uses advised against None known.

1.3 Details of the supplier of the safety data sheet

Company Name Europa Bioproducts Ltd

Address 15-17 North Street, Wicken, Cambridgeshire, CB7 5XW, United Kingdom

Telephone +44 (0)1353 721118 FAX +44 (0)1353 624589

Email info@europa-bioproducts.com

1.4 Emergency telephone number

During normal office hours +44 (0)1353 721118 (9:00-17:00 GMT Monday to Friday)

Outside office hours +44 (0)1284-811570

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance

Substance according to Directive 67/548/EEC or 1999/45/EC as amended

Classification: Xi; R37

Risk Phrases:

R37 Irritating to respiratory system

Safety Phrases:

S22 Do not breath dust

S24/25 Avoid contact with skin and eyes

Substance according to regulation according to Regulation (EC) No 1272/2008 as amended

STOT SE 3: Specific target organ toxicity — single exposure (inhalation)

2.2 Label elements

Signal Word: Warning

Hazard Pictogram(s):



Hazard Statement:

H335: May cause respiratory irritation

Precautionary Statements:

P261 Avoid breathing dust.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for

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breathing.

P312: Call a POISON CENTER or doctor/physician if you feel unwell.
P501 Dispose of contents/container to an approved waste disposal plant

2.3 Other hazards

None known

Additional Notes: Inhalation of albumin dust or aerosols resulting from handling may irritate the airways and may cause allergic reactions in sensitised individuals.

3. **COMPOSITION / INFORMATION ON INGREDIENTS**

3.1 Substance

Component	CAS number	EC number	Amount	According to Regulation (EC) No 1278/2008 (CLP).
Albumin powder	9048-46-8	232-936-2	96-100%	STOT-SE3: H335
				Classification according to 67/548/EEC Xi: R37

3.2 **Mixture** Not relevant

4. FIRST AID MEASURES

4.1 Ingestion:

Do not induce vomiting. Wash out mouth with water provided that the casualty is conscious. Seek medical attention.

Inhalation:

Remove from exposure. Keep warm and at rest. Treat symptomatically. Seek medical advice if discomfort occurs.

Skin:

Wash the affected area thoroughly with water. Remove contaminated clothing and launder before reuse.

Eyes:

Flush eyes with copious amounts of water for at least 15 minutes, lifting upper and lower lids. Seek medical attention if irritation occurs.

Most important symptoms and effects, both acute and delayed.

- **4.2** Inhalation of albumin dust or aerosols resulting from handling may irritate the airways and may cause allergic reactions in sensitised individuals.
- Indication of any immediate medical attention and special treatment needed.

Provide general supportive measures and treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media:

Use any media appropriate for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

May emit toxic fumes under fire conditions.

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective clothing if necessary.

6. ACCIDENTAL REALEASE MEASURES

Personal precautions, protective equipment and emergency procedures.

Avoid dust formation. Use personal protective wear as detailed in section 8. .

Environmental precautions

6.2 Prevent contamination of drains, sewers, watercourses and ponds. **BSA is a category 3 Animal by product and disposal is in accordance with Regulation (EU) 1069/2009.**

Methods and materials for containment and cleaning up.

Small amounts of material should be wiped up with a damp cloth. Place in a suitable container and store pending disposal. Ventilate the area and wash the spill site with water once all material has been cleaned up. Do not use a high-pressure water jet.

For large spillages avoid generation of dust. Vacuum spilled material or Sweep up and shovel into waste drums or plastic bags. Transfer to a container for disposal.

Reference to other sections

6.4 Refer to Section 8 for information regarding Personal Protective Equipment.

Refer to Section 13 for information regarding disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Prevent contact with skin and eyes. Avoid dust formation. Persons susceptible to allergic reactions should not handle this product unless they work in an extracted enclosure wearing protective clothing as required.

Conditions for safe storage, including any incompatibilities.

- 7.2 Store in the original, tightly closed container. To avoid deterioration of the product store at 4 °C or -20 °C but avoid repeated freeze-thawing.
- 7.3 Specific end uses.
 - Laboratory reagent (same as 1.2 unless CSR is available)

8. **EXPOSURE CONTROLS / PERSONAL PROTECTION**

Control parameters

Workplace Exposure Limits (United Kingdom): none relevant

Biological limit value - not established

PNECs and DNELS - not established

8.2 Exposure controls

Appropriate engineering controls

Work in extracted enclosures

8.3 Personal protective equipment

Eye/face protection

Wear safety glasses conforming to European Standard EN166.

Skin protection

Wear protective gloves conforming to European Standard EN374. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with the product. Dispose of contaminated gloves safely after use. Wash and dry hands.

Body protection

Wear laboratory coat or overall

Respiratory protection

Normally no personal respiratory protection is necessary. In case of inadequate ventilation wear respiratory protection. A suitable dust mask or dust respirator with filter type P (EN143 or EN405) may be appropriate.

Thermal hazards - Not applicable

General

The potential for, and extent of exposure should be taken into account when determining the appropriate PPE to wear.

PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearance: powder

b) Odour:

No data available

Odour Threshold:

No data available

d) pH: 7.0

e) Melting point / freezing point:
 No data availablef) Initial boiling point and boiling range:
 No data availableg) Flash point:
 No data available

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h) Evaporation rate: No data available
i) Flammability (solid, gas): No data available

j) Upper / lower flammability or explosive

limits:

No data available

k) Vapour pressure:

No data available

No data available

n) relative density:

No data available

9. PHYSICAL AND CHEMICAL PROPERTIES continued

n) Solubility(ies):

o) Partition coefficient: n-octanol / water:

No data available

p) Auto-ignition temperature:

No data available

q) Decomposition temperature:

No data available

r) Viscosity:

No data available

s) Explosive properties:

No data available

t) Oxidizing properties: No data available

9.2 Other information No other information is available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable at normal temperatures and pressures. .

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents, strong acids and bases

Hazardous decomposition products

10.6 No data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

a) Acute toxicity:

No data available

b) Skin corrosion / irritation: Prolonged contact may cause irritation

c) Serious eye damage / eye irritation: No data available

d) Respiratory or skin sensitization:

e) Germ cell mutagenicity:
No data available
f) Carcinogenicity:
No data available
g) Reproductive toxicity:
No data available

h) Specific target organ toxicity - single

exposure:

H335; May cause irritation if inhaled)

i) Specific target organ toxicity - repeated

exposure:

No data available

j) Aspiration hazard: No data available

Potential health effects

Ingestion: No data available

Inhalation: May cause irritation. May cause sensitisation and cause

allergenic type responses in sensitised individuals.

Skin: Prolonged contact may cause irritation.

Eyes: May cause irritation.

Signs and Symptoms of ExposureNo other specific acute on the degradability of this product

To the best of our knowledge, the chemical, physical, and toxicological properties of the product

have not been thoroughly investigated.

Additional Information No additional information is available

12. ECOLOGICAL INFORMATION

General information: The disposal of BSA is controlled by Regulation (EU) 1069/2009 to prevent the risk of entry into the animal food supply chain as a potential danger to animal health.

12.2 Persistence and degradability Proteins are readily degradable.

12.3 Bio accumulative potential Unlikely to bioaccumulate, water soluble.

12.1 Toxicity No data available

12.4 Mobility in soilNo data available

12.5 Results of PBT and vPvB assessment No data available

12.6 Other adverse effects May be a risk to Animal Health

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Contact a licensed professional waste disposal service to

Product dispose of this material. Incineration is the normal method of

disposal, as per 1069/2009.

Contaminated packaging Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 UN number

ADR/RID: - IMDG: - ATA: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: -IMDG: -IATA: -

14.4 Packaging group

ADR/RID: - MDG: - IATA: -

14.5 Environmental hazards

ADR/RID: No IMDG Marine pollutant: No IATA: No

14.6 Special precautions for user

No information available

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

15. REGULATORY INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 [REACH], as amended by Commission Regulation (EU) No 453/2010.

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture

Regulation (EC) 1069/2009

15.2 Chemical Safety Assessment

No information available

16. OTHER INFORMATION

Key to abbreviations and acronyms

ADR: Accord European sur le transport des merchandises Dangereuses par Route (European

Agreement concerning the International Carriage of Dangerous Goods by road)

CAS: Chemical Abstracts Service

IARC: International Agency for Research on Cancer

IATA: International Air Transport Association

IMDG: International Maritime Code for Dangerous Goods

REACH: Registration, Evaluation, Authorisation and restriction of Chemicals

RID: Reglement International concernant le transport des merchandises Dangereuses par chemin de

fer (Regulations concerning the International transport of Dangerous Goods by Rail)

Disclaimer

The information provided in this data sheet is correct to the best of our knowledge at the date of publication. It is intended to provide guidance in the safe handling, use, storage, transportation and disposal of the material. The information does not constitute the user's own assessment of workplace risk as required by UK legislation currently in force. Only competent persons within a suitably controlled environment should handle chemicals. Europa Bioproducts Ltd. cannot accept liability for any loss or damage relating to the use of this information.

Classification of the substance or mixture According to Regulation (EC) No. 1272/2008 (CLP).

STOT-SE3; H335 (Inhalation)

Classification Procedure

Self-classification based on human experience

Safety Data Sheet prepared by

Europa Bioproducts Ltd Jan 25 2012

Reason for issue / revision of Safety Data Sheet: New Safety Data Sheet

END OF SAFETY DATA SHEET