

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING**1.1 Product Identifier**

Product Name Bovine Serum Albumin Heat Shock, Standard Grade Powder, pH 7.0
Catalogue Number EQBAH62
Synonyms BSA
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
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1.4 Emergency telephone number

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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

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.

4.3 **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 RELEASE MEASURES**

6.1 **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.

6.3 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.

Specific end uses.

7.3 Laboratory reagent (same as 1.2 unless CSR is available)

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**Control parameters**

8.1 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.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

- | | |
|---|-------------------|
| a) Appearance: | powder |
| b) Odour: | No data available |
| c) Odour Threshold: | No data available |
| d) pH: | 7.0 |
| e) Melting point / freezing point: | No data available |
| f) Initial boiling point and boiling range: | No data available |
| g) Flash point: | No data available |

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
l) Vapour density:	No data available
m) relative density:	No data available

9. PHYSICAL AND CHEMICAL PROPERTIES continued

n) Solubility(ies):	Soluble in water
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
	No other information is available.

9.2 Other information

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

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 Exposure

No 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 soil	No 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****Product**

Contact a licensed professional waste disposal service to 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 marchandises 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 marchandises 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