MSDS recombinant Shrimp Alkaline Phosphatase (rSAP)

1. PRODUCT AND COMPANY IDENTIFICATION

Identification of Substance
Denomination: Shrimp Alkaline Phosphatase
Code: 70700-xxx

Identification of the company
Name: ArcticZymes AS
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         N-9294 Tromsø
         NORWAY
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2. HAZARDS IDENTIFICATION

GHS classification: This product is not classified as hazardous according to OSHA Hazard
GHS label elements: N/A
Other hazards: N/A

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization: Aqueous solution, consisting of the following component above the
cut-off level:

Chemical name on component: Glycerol, CAS# 56-81-5, concentration 50% (v/v)
Other components: Components not listed here are not hazardous or their concentrations
do not exceed the limits specified in the GHS regulations

4. FIRST AID MEASURES

Inhalation: If breathing becomes difficult, remove victim to fresh air. Seek medical
assistance immediately.
Ingestion: No adverse effects are reasonably anticipated. However, if any
symptoms occur keep victim warm and calm. Get medical attention
immediately.
Skin contact: Avoid skin contact. If skin contact occurs, wash contaminated skin
with soap and water and remove contaminated clothing. Get medical
attention if the skin becomes irritated.
Eye contact: Flush contaminated eye(s) with large volumes of water for at least 15
minutes.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Use fire extinguishing media appropriate for site conditions
Special protective equipment: None necessary
Unusual fire and explosion
hazards: None
6. ACCIDENTAL RELEASE MEASURES

Personal safety precautions: None
Environmental precautions: None
Methods and material for containment and cleaning up: Dilute with plenty water. Use an absorbent material to contain/pick up spilled solution. Place all contaminated disposables into a suitable container, seal, label and hold for disposal.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes and skin.
Storage: Store between -20°C and -30°C.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Component with limit values for exposure: 56-81-5, Glycerol:
PEL: 15 mg/m³ (total dust), 5 mg/m³ (respirable fraction);
TLV: 10 ppm (mist)
Ventilation data: Supplemental ventilation is not required for the use of this product.
Respiratory protection: Respiratory protection is not required.
Protective gloves: Rubber or chemical resistant gloves should be worn.
Other protective equipment: Safety glasses with side shields are advised. Eye wash stations and deluge showers should also be available and a lab coat should be worn.
Other engineering controls: None necessary
Work practices: Good laboratory technique should be used when handling this product. Observe appropriate chemical hygiene. Avoid contact with skin or eyes. Do not place in mouth.
Hygiene practices: Do not eat, drink or smoke while working with product. Upon completion of work activities involving this product, wash hands thoroughly with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

For all components unless otherwise indicated:

Appearance: Viscous, clear, colorless and odourless liquid
Relative vapour density: Not determined
Flash point: N/A
Auto ignition: None
Decomposition temperature: Not determined
Explosion hazard: None
Specific gravity: 1.15 g/cm³
Solubility in water: Soluble in water
Vapour pressure: Not determined
Evaporation rate: Not determined
Freezing/Melting point: Not determined
Boiling point: Not determined
pH: 7.6

10. STABILITY AND REACTIVITY

Incompatible materials: None known
Possible hazardous reactions: None known
Conditions to avoid: None known
Chemical stability: The product is stable under recommended handling and storage conditions (excess heat, flame or pressure)

11. TOXICOLOGICAL INFORMATION

Likely routes of exposure: Skin or eye contact
Acute toxicity: None
Skin contact: Prolonged skin contact may cause irritation
Eye contact: May cause mild irritation
Sensitization: N/A
Reproductive effects: N/A
Target organ effects: N/A
Carcinogenicity: None

12. ECOLOGICAL INFORMATION

Environmental fate/stability: Components are found in nature and are fully biodegradable
Effects on plants or animals: N/A
Effect on aquatic life: N/A

13. DISPOSAL CONSIDERATIONS

Waste disposal method: Not classified as dangerous waste. Smaller quantities may be disposed of with household waste. Larger quantities: consult local waste disposal regulations.

14. TRANSPORT INFORMATION

Is this material hazardous? No
Proper shipping name: N/A
UN Identification number: N/A
Packing group: N/A
ADR/RID class: Non-hazardous for road transport
IMDG class: Non-hazardous for sea transport
IATA class: Non-hazardous for air transport

15. REGULATORY INFORMATION

Non-hazardous, no regulatory information applicable.
No R- or S- sentences applicable.

16. OTHER INFORMATION

Product must be stored, handled and used according to good manufacturing practise.
The above information is believed to be correct, but does not purport to be all inclusive and shall be used only as a guide. ArcticZymes AS shall not be held liable for any damage resulting from handling or contact with the above product.