# Safety Data Sheet

**according to Regulation (EC) No. 1907/2006 (REACH)**



## 1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND OF THE COMPANY/ UNDERTAKING

| Product name | Product number |
|---|---|
| AffiSep®-PNA column | 011061, 011062, 011063, 011064 |
| AffiSep®-AIL column | 011071, 011072, 011073, 011074 |
| AffiSep®-SNA column | 011121, 011122, 011123, 011124 |
| AffiSep®-PNA Kit | 031061 |
| AffiSep®-AIL Kit | 031071 |
| AffiSep®-SNA Kit | 031121 |
| AffiSpin®-PNA Kit | 051061 |
| AffiSpin®-AIL Kit | 051071 |
| AffiSpin®-SNA Kit | 051121 |
| AffiSep®-PNA SPE cartridge | 061062 |
| AffiSep®-AIL SPE cartridge | 061072 |
| AffiSep®-SNA SPE cartridge | 061122 |
| AffiSep®-PNA adsorbent | 121061, 121062 |
| AffiSep®-AIL adsorbent | 121071, 121072 |
| AffiSep®-SNA adsorbent | 121121, 121123 |

Use of the substance/ preparation: Isolation of glycoproteins using the affinity technique


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## 2. HAZARDS IDENTIFICATION

Classification: The preparations are not harmful.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Preparation related information:

1. The lectins PNA(*Peanut agglutinin*), AIL (*Artocarpus integrifolia lectin* and SNA (*Sambucus nigra agglutinin*) are immobilised onto insoluble particles, suspension in hepes buffer, pH 8.0
2. Hepes buffered solution, pH 8.0, contains sodium azide (Adsorption and Elution Buffer)

Hazard ingredients:

| Chemical name | CAS-No. | EC-number | Content [%] | Classification | | |
|---|---|---|---|---|---|---|
| | | | | Symbol | R-Set | S-Set |
| Sodium azide | 26628-22-8 | 247-852-1 | 0,05 | - | - | - |

Additional information:

Toxic and environmentally hazardous substances <0,1 % do not underlie the Directive 1999/45/EC and must not be described in detail.

## 4. FIRST AID MEASURES

In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse.

In case of eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

In case of ingestion: If swallowed, wash out mouth with water provided person is conscious. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt o waistband.

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray, carbon dioxide, dry powder or appropriate foam

Special exposure hazards arising from the substances or preparation itself, combustion products, resulting gases: May be combustible at high temperature. Emits toxic fumes under fire conditions.

Special protective equipment for fire-fighters: Fire fighters should wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Be sure to wear an approved/certified respirator or equivalent.

Additional information: The preparation is mainly packed in plastic material.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Removal of ignition sources. Provision for sufficient ventilation and respiratory protection. Control of dust formation. Prevention of skin and eye contact.

Environmental precautions: Keeping away from drains, surface- and ground water and soil, possible need to alert the neighbourhood.

Methods for cleaning-up: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Avoid raising dust. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

## 7. HANDLING AND STORAGE

Handling: To avoid formation of dust, do not open the column and take out the adsorbent (011061, 011062, 011063,011064, 011071, 011072, 011073, 011074, 011121, 011122, 011123, 011124, 031061, 031071, 031121, 051061,051071, 051121, 061062, 061072, 061122).
To avoid formation of dust, always work on with the adsorbent in suspension (121061, 121062, 121071, 121072, 121121, 121123). Do not dry out the adsorbent. Working temperature can be from 4-20 °C.

Further information: Eluted fractions enriched by e.g. lyophilisation will also result in a higher concentration of sodium azide.

Storage: Store at 4 °C. Keep the adsorbent in buffer containing a preservative.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment: Provide exhaust ventilation.
Respiratory protection: Where dry adsorbent appears, use a dust mask type FFP2.

Hand protection: Handle with gloves.

Eye protection: Safety glasses. Ensure that eye wash stations are proximal to the work station location.

Body protection: Use a lab coat. Ensure that safety showers are proximal to the work station location.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical state: suspension
Colour: white
Odour: no data available
Safety relevant basis data
pH (20 °C): 8,0
Water solubility (20 °C in g/ L): water insoluble

## 10. STABILITY AND REACTIVITY

The product is stable under the recommended storage and handling conditions.

Conditions to avoid: Freezing. Heating
Materials to avoid: Strong oxidising agents.
Hazardous combustion or decomposition products: Carbon monoxide, carbon dioxide, nitrogen oxides

## 11. TOXICOLOGICAL INFORMATION

Acute effects (toxicity tests): no data available
Specific symptoms an animal studies: no data available
Irritant and corrosive effects: no data available
Irritation to respiratory contract: no data available
Sensitization: May cause allergic reaction.
In case of skin contact: May cause sensitization by skin contact.
In case of inhalation: May cause sensitization of the mucous membranes and upper respiratory tract.

Signs and symptoms of exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

Ecotoxicity: no data available

Mobility: no data available
Persistence and degradability: no data available
Biodegradation: The products of degradation are less toxic than the product itself.

## 13. DISPOSAL CONSIDERATIONS

Appropriate disposal/ Product: Waste must be disposed in accordance with federal, state and local regulations. Contact a licensed disposal service to dispose of this material.

## 14. TRANSPORT INFORMATION

Land transport (ADR/ RID/ GGVSE): Non-hazardous for road transport.
Sea transport (IMDG-Code/ GGVSee): Non-hazardous for sea transport.
Air transport (ICAO-IATA/ DGR): Non-hazardous for air transport.

## 15. REGULATORY INFORMATION

EU-Regulations:
Labelling

| | |
|---|---|
| Chemical name: | Sodium azide (> 0,1 %) |
| Indication of danger: | $T^+$, N |
| Classification: | Very toxic, Dangerous for the environment |
| R-Phrases: | R 28, 32, 50/53<br>Very toxic if swallowed.<br>Contact with acids liberates very toxic gas.<br>Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment |

S-Phrases: S 28, 45, 60, 61
After contact with skin, wash immediately with plenty of soapy water.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
This material and its container must be disposed of as hazardous waste.
Avoid release to the environment. Refer to special instructions/ Safety data sheets.

**16 OTHER INFORMATION**

**Disclaimer:** The information herein is believed to be accurate but it is the responsibility of the user to determine the applicability of these data to the formulation of necessary safety precautions. GALAB Technologies GmbH makes no representation, warranty or guarantee of any kind with respect to the information contained in this document or any use of the product based on this information. The information does not purport to be all inclusive and shall be used only as a guide. GALAB shall not be held liable for any damage resulting from handling or from contact with any damage resulting from handling or from contact with the above product.
GALAB Technologies GmbH

# Safety Data Sheet

**according to Regulation (EC) No. 1907/2006 (REACH)**



## 1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND OF THE COMPANY/ UNDERTAKING

| Produktbezeichnung | Produktnummer |
|---|---|
| Adsorption buffer Hepes, pH 8.0 | 091181 |
| PNA Elution Buffer B1/ B2 | 101063/ 101065, 101066 |
| AIL Elution Buffer B1/ B2 | 101075, 101076 |
| SNA-Elution Buffer B1 | 101123 |

Use of the substance/ preparation: Adsorption, Wash and Regeneration Buffer/ Elution Buffer


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## 2. HAZARDS IDENTIFICATION

Classification: The preparation is irritant, harmful and harmful to aquatic organism.

Information pertaining to special dangers for human an environment:
Adverse human health effects and symptoms: The preparation irritates the eyes, the upper respiratory tract and The skin. Swallowing is harmful.
Adverse environmental effects: The preparation is harmful to aquatic organisms.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Preparation related information:

1. Hepes buffer, pH 8.0

Hazard ingredients:

| Chemical name | CAS-No. | EC-No. | Content [%] | Classification | | |
|---|---|---|---|---|---|---|
| | | | | Hazards characteristics | R-Set | S-Set |
| $CaCl_2 * 2H_2O$ | 10035-04-8 | 233-140-8 | 1,3 | Xi | 36 | 26 |
| $MnCl_2 * 4H_2O$ | 13446-34-9 | 231-869-6 | 1,6 | Xn | 22-52 | - |

## 4. FIRST AID MEASURES

In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse.

In case of eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

In case of ingestion: If swallowed, wash out mouth with water provided person is conscious. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt o waistband.

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray, carbon dioxide, dry powder or appropriate foam

Special exposure hazards arising from the substances or preparation itself, combustion products, resulting gases: May be combustible at high temperature. Emits toxic fumes under fire conditions.

Special protective equipment for fire-fighters: Fire fighters should wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Be sure to wear an approved/certified respirator or equivalent.

Additional information: The preparation is packed in a plastic bottle.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Removal of ignition sources. Provision for sufficient ventilation and respiratory protection. Control of dust formation. Prevention of skin and eye contact.

Environmental precautions: Keeping away from drains, surface- and ground water and soil, possible need to alert the neighbourhood.

Methods for cleaning-up: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Avoid raising dust. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

## 7. HANDLING AND STORAGE

Handling: Keep container closed until use. Avoid formation of dust. Transfer salts in a ventilated hood dust-reduced to an appropriate vessel and fill it up to the specified volume. Working temperature can be from 4 to 20 °C.

Storage: Store at 20 °C. Unresolved salts can be stored at 20 °C. Dissolved salts should contain a preservative and can also be stored at 20 °C.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment: Provide exhaust ventilation.
Respiratory protection: Use a dust mask type FFP2.

Hand protection: Handle with gloves.

Eye protection: Safety glasses. Ensure that eye wash stations are proximal to the work station location.

Body protection: Use a lab coat. Ensure that safety showers are proximal to the work station location.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical state: solid, crystalline
Colour: white, white-yellow
Odour: no data available

Safety relevant basis data
pH (20 °C): 8,0

## 10. STABILITY AND REACTIVITY

The product is stable under the recommended storage and handling conditions.

Conditions to avoid: Freezing. Heating.
Materials to avoid: Strong oxidising agents.

Hazardous combustion or decomposition products: The nature of decomposition products are not known.

## 11. TOXICOLOGICAL INFORMATION

Acute effects (toxicity tests): no data available
Specific symptoms an animal studies: no data available
Irritant and corrosive effects: no data available
Irritation to respiratory contract: Material is irritating to mucous membranes and upper respiratory tract.

Sensitization: May cause allergic reaction.
In case of skin contact: May cause skin irritation.
In case of inhalation: May be harmful if inhaled. Material is irritating to mucous membranes and upper respiratory tract.

Signs and symptoms of exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

## 12. ECOLOGICAL INFORMATION

Ecotoxicity: no data available

Mobility: no data available
Persistence and degradability: no data available
Biodegradation: The products of degradation are less toxic than the product itself.

## 13. DISPOSAL CONSIDERATIONS

Appropriate disposal/ Product: Waste must be disposed in accordance with federal, state and local regulations. Contact a licensed disposal service to dispose of this material.

## 14. TRANSPORT INFORMATION

Land transport (ADR/ RID/ GGVSE): Non-hazardous for road transport.
Sea transport (IMDG-Code/ GGVSee): Non-hazardous for sea transport.
Air transport (ICAO-IATA/ DGR): Non-hazardous for air transport.

## 15. REGULATORY INFORMATION

EU-Regulations:
Labelling

| | |
|---|---|
| Chemical name: | Calciumchloride Dihydrate |
| Indication of danger: | Xi |
| Classification: | Irritant |
| Risk-Phrases : | R 36<br>Irritating to eyes. |
| Safety-Phrases: | S 26<br>In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |

| | |
|---|---|
| Chemical name : | Manganese chloride Tetrahydrate |
| Indication of danger: | Xn |
| Classification: | Harmful |
| Risk-Phrases : | R 22-52<br>Harmful if swallowed.<br>Harmful to aquatic organisms. |

## 16 OTHER INFORMATION

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GALAB Technologies GmbH

# Safety Data Sheet

**according to Regulation (EC) No. 1907/2006 (REACH)**



## 1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND OF THE COMPANY/ UNDERTAKING

Product name: Glycoprotein standard
Product number: 071010, 071011
Use of the substance: Reference material
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## 2. HAZARDS IDENTIFICATION

Classification: The substance is not harmful.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance related information:

1. Asialofetuin from fetal calf serum

Hazard ingredients:

| Chemical name | CAS-No. | EC-No. | Content [%] | Classification | | |
|---|---|---|---|---|---|---|
| | | | | Hazards characteristics | R-Set | S-Set |
| Asialofetuin | - | - | 100 | - | - | - |

## 4. FIRST AID MEASURES

In case of inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse.

In case of eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

In case of ingestion: If swallowed, wash out mouth with water provided person is conscious. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt o waistband.

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water spray, carbon dioxide, dry powder or appropriate foam

Special exposure hazards arising from the substances or preparation itself, combustion products, resulting gases: May be combustible at high temperature. Emits toxic fumes under fire conditions.

Special protective equipment for fire-fighters: Fire fighters should wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Be sure to wear an approved/certified respirator or equivalent.

Additional information: The preparation is packed in a plastic bottle.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Removal of ignition sources. Provision for sufficient ventilation and respiratory protection. Control of dust formation. Prevention of skin and eye contact.

Environmental precautions: Keeping away from drains, surface- and ground water and soil, possible need to alert the neighbourhood.

Methods for cleaning-up: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Avoid raising dust. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

## 7. HANDLING AND STORAGE

Handling: Keep container closed until use. Avoid formation of dust. Dissolved product should be portioned frozen. Avoid alternate freezing and thawing.
Storage: Store at 2-8 °C.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment: Provide exhaust ventilation.
Respiratory protection: Use a dust mask type FFP2.

Hand protection: Handle with gloves.

Eye protection: Safety glasses. Ensure that eye wash stations are proximal to the work station location.

Body protection: Use a lab coat. Ensure that safety showers are proximal to the work station location.

Hygiene measures: Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical state: solid
Colour: white
Odour: no data available

Safety relevant basis data
pH (20 °C): no data available

## 10. STABILITY AND REACTIVITY

The product is stable under the recommended storage and handling conditions.

Conditions to avoid: Freezing. Heating.
Materials to avoid: Strong oxidising agents.
Hazardous combustion or decomposition products: The nature of decomposition products are not known.

## 11. TOXICOLOGICAL INFORMATION

Acute effects (toxicity tests): no data available
Specific symptoms an animal studies: no data available
Irritant and corrosive effects: no data available
Irritation to respiratory contract: no data available
Sensitization: no data available
In case of skin contact: no data available
In case of inhalation: no data available

Signs and symptoms of exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**12. ECOLOGICAL INFORMATION**

Ecotoxicity: no data available
Mobility: no data available

Persistence and degradability: no data available
Biodegradation: The products of degradation are less toxic than the product itself.

**13. DISPOSAL CONSIDERATIONS**

Appropriate disposal/ Product: Waste must be disposed in accordance with federal, state and local regulations. Contact a licensed disposal service to dispose of this material.

**14. TRANSPORT INFORMATION**

Land transport (ADR/ RID/ GGVSE): Non-hazardous for road transport.
Sea transport (IMDG-Code/ GGVSee): Non-hazardous for sea transport.
Air transport (ICAO-IATA/ DGR): Non-hazardous for air transport.

**15. REGULATORY INFORMATION**

EU-Regulations:
Labelling
Chemical Name: Asialofetuin

Caution: The substance is not yet fully tested.

**16 OTHER INFORMATION**

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