

# Safety Data Sheet

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

Trade name: -  
Product No: -

Version: 1.0/ EN  
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Print Date: 6 April 2009  
Revision Date: 6 April 2009

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

Product name	Product number
Glyco Cleave <sup>®</sup> -Neuraminidase EnzymeBeads	132011, 132012
Glyco Cleave <sup>®</sup> -Neuraminidase Kit	132100

**Use of the substance/ preparation:** Enzymatic hydrolysis of  $\alpha$ 2-3,  $\alpha$ 2-4,  $\alpha$ 2-6 and  $\alpha$ 2-8 bonds of terminal N-Acetylneuraminic acid

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**Emergency Phone:** +49 (0) 4152-889400 (Mo - Fr 09.00 – 17.00)

## 2. HAZARDS IDENTIFICATION

**Classification:** The preparation is not harmful.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Preparation related information:**

1. Neuraminidase from *Vibrio cholerae* immobilised onto polymer particles, Suspension in sodium acetate buffer, pH 5.5
2. Sodium acetate buffer, pH 5.5, enthält sodium azide

**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.

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**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, always work on with the adsorbent in suspension (132011, 132012, 132100). 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):** 6,0

**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.

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**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 tract:** no data available

**Sensitization:** Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

**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.

**Specific symptoms in animal studies:**

**In case of ingestion:** May be harmful if swallowed.

**In case of skin contact:** May cause skin irritation.

**In case of inhalation:** Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

**In case of eye contact:** May cause eye irritation.

## 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<sup>+</sup>, N

**Classification:** Very toxic, Dangerous for the environment

**R-Phrases:** R 28, 32, 50/53

Very toxic if swallowed.

Contact with acids liberates very toxic gas.

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.

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Avoid release to the environment. Refer to special instructions/ Safety data sheets.

**16 OTHER INFORMATION**

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GALAB Technologies GmbH

# Safety Data Sheet

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

Trade name: GlycoCleave® Neuraminidase Reaction Buffer

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Print Date: 6 November 2008

Revision Date: 6 November 2008

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

**Product name:** GlycoCleave® Neuraminidase Reaction Buffer  
**Product number:** -  
**Use of the substance/ preparation:** Reaction Buffer of GlycoCleave® Neuraminidase Kit (Prod.nr. 132100)  
**Company:** GALAB Technologies GmbH  
Max-Planck-Str. 1  
21502 Geesthacht  
Germany  
**Telephone:** +49 (0) 4152-889400  
**Fax:** +49 (0) 4152-889401  
**E-Mail /Internet:** [info@galab.de](mailto:info@galab.de)/[www.galab.de](http://www.galab.de)  
**Emergency Phone:** +49 (0) 4152-889400 (Mo - Fr 09.00 – 17.00)

## 2. HAZARDS IDENTIFICATION

**Classification:** The preparation is non-toxic and not harmful to the environment.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

**Preparation related information:**

1. Sodium acetate buffer, pH 5.5, contains sodium azide

**Hazard ingredients:**

Chemical name	CAS-No.	EC-No.	Content [%]	Classification		
				Hazards characteristics	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.

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Trade name: GlycoCleave<sup>®</sup> Neuraminidase Reaction Buffer

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**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. The working temperature can be from 4-20 °C. Do not change the pH of these buffers.

**Storage:** Store at 4-8 °C.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Personal protection equipment:** Provide exhaust ventilation.

**Respiratory protection:** Provide exhaust ventilation.

**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:** liquid, aqueous solution

**Colour:** colourless

**Odour:** no data available

**Safety relevant basis data**

**pH (20 °C):** 5,5

## 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.

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## 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 tract: 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.

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Land transport (ADR/ RID/ GGVSE): Non-hazardous for road transport.

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Labelling

Chemical name: Sodium azide (> 0,1 %)

Indication of danger: T<sup>+</sup>, N

Classification: Very toxic, Dangerous for the environment

R-Phrases: R 28, 32, 50/53

Very toxic if swallowed.

Contact with acids liberates very toxic gas.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

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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).

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## 16 OTHER INFORMATION

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