



# Safety Data Sheet

Complies Regulation (EC) No. 1907/2006 (REACH), Annex II,  
modified according to Regulation (EC) 453/2010 - Europe

**ANTIGENES**

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## SemenGlu

### 1. Identification of the substance/mixture and of the supplier

**Product Name:** SemenGlu  
**Product Code :** ZR10500  
**Application:** **Determination of the glucose content in sperms**  
***In vitro* diagnostics**  
**Company:** ANTIGENES, Hustadtring 151, 44801 Bochum, Germany  
**Homepage:** [www.antigenes.de](http://www.antigenes.de)  
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**Emergency call:** For Germany  
+49 (0) 551 - 19240 Poison Information Centre

### 2. Hazards identification

#### 2.1 Classification and labeling

Classification according to Regulation (EC) No. 1272/2008. Classification according to Directive 67/548 / EEC or Directive 1999/45 / EC. Labeling according to Regulation (EC) No. 1272/2008. The substance / product is classified and labeled according to the CLP Regulation.

#### p-Nitrophenol



#### Special risks and safety tips

R20/R21/R22 Harmful by inhalation, in contact with skin and if swallowed.  
R33 Danger of cumulative effects.  
S2 Keep out of the reach of children.

S28 After contact with skin, wash immediately with plenty of water.

#### Hazard statements and safety information

H301/H311/H331 Toxic if swallowed, in contact with skin or if inhaled  
H373 May cause damage to organs (state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).  
H400 Very toxic to aquatic life.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash utensils thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P501 Dispose of contents/container according to 94/62/CE or 2008/98/CE.

#### Sodium dodecyl sulfate (SDS)



#### Special risks and safety tips

R11 Highly flammable.

R21/R22 Harmful by inhalation and in contact with skin.

R36/R37/R38 Irritating to eyes, respiratory system and skin.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/S37 Wear suitable protective clothing and gloves.

#### Hazard statements and safety information

H228 Flammable solid.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H315 Causes skin irritation.  
 H318 Causes serious eye damage.  
 H332 Harmful if inhaled.  
 H335 May cause respiratory irritation.  
 H413 May cause long lasting harmful effects to aquatic life.  
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P373 DO NOT fight fire when fire reaches explosives.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P305/P351/P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Sodium chloride (NaCl)****Special risks and safety tips**

no R- and S-phrases

**Hazard statements and safety information**

no H- and P-phrases

**Sodium-hydrogen-phosphate (Na<sub>2</sub>HPO<sub>4</sub>)****Special risks and safety tips**

no R- and S-phrases

**Hazard statements and safety information**

no H- and P-phrases

**Potassium chloride (KCl)****Special risks and safety tips**

no R- and S-phrases

**Hazard statements and safety information**

no H- and P-phrases

**Castanospermine****Special risks and safety tips**

no R- and S-phrases

**Hazard statements and safety information**

no H- and P-phrases

**p-Nitrophenol- $\alpha$ -Glukopyranoside****Special risks and safety tips**

R36 Irritating to eyes.

**Hazard statements and safety information**

H319 Causes serious eye irritation.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305/P351/P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Sodium carbonate (Na<sub>2</sub>CO<sub>3</sub>)****Special risks and safety tips**

R36 Irritating to eyes.

S2 Keep out of the reach of children.

S22 Do not breathe dust.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

**Hazard statements and safety information**

H319 Causes serious eye irritation.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P305/P351/P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**2.2 Other hazard statements**

All chemicals are potentially dangerous. They are therefore only be handled by specially trained personnel with the necessary care.

**3. Composition/information on ingredients**

Component	Reagents	CAS-Code	Quantity
Solution 1	P-Nitrophenole		not specified
Solution 2	NaCl	7647-14-5	not specified
	KCl	7447-40-7	not specified
	Na <sub>2</sub> HPO <sub>4</sub>	7558-79-4	not specified
	NaHPO <sub>4</sub>	144-55-8	not specified

Solution 3	Natriumazid		not specified
Solution 4	SDS		not specified
Solution 5	Castanospermine		not specified
	P-Nitrophenol-Glukopyranoside	3767-28-0	not specified
	Sodium carbonate	497-19-8	not specified

## 4. First aid measures

### 4.1 Description of first aid measures

After inhalation of dusts: supply fresh air; if any symptoms occur seek medical advice.

After skin contact: wash with water.

After eye contact: rinse with open eyelid for 10 minutes under running water and seek medical advice.

After swallowing: rinse mouth and then drink water.

If symptoms persist seek medical advice.

### 4.2 The most important acute and delayed symptoms and effects

Cause irritation, cough, stomach and intestinal disorders

### 4.3 Indication of immediate medical attention and special treatment

No further relevant information available

## 5. Fire fighting measures

### 5.1 Extinguishing media

Suitable extinguishing agents: Use fire fighting measures that suit the environment.

Unsuitable extinguishing agents: for this substance / mixture no limitations of extinguishing agents are known.

### 5.2 Special hazards arising from the substance or mixture

Product non-combustible.

Ambient fire may liberate hazardous vapors.

In case of fire can be released: Carbon monoxide and carbon

### 5.3 Advice for firefighters

Protective equipment: Wear self-contained breathing apparatus.

## 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact.

Do not breathe dust.

### 6.2 Environmental precautions

Do not flush into sewers or waterways.

### 6.3 Methods and material for containment and cleaning up

Pick up mechanically. Dispose of the captured material properly. Clean the area with gloves and masks with water and dry thoroughly. Air the room. Wash coat and contaminated clothing.

## 7. Handling and storage

Store at cold temperatures (2-8°C).

## 8. Exposure controls/personal protection

Wear gloves, mask and coat while handling during the execution. Avoid smoking and acting with high heat-generating appliances.

## 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

	Solution 1	Solution 2	Solution 3	Solution 4
Aggregate state	liquid	liquid	liquid	liquid
Color	not determined	not determined	not determined	white to off-white solid
Odor	not specified	not specified	not specified	not specified
Melting point	not determined	not determined	not determined	not determined
Boiling point	not determined	not determined	not determined	not determined
Inflammability	not determined	not determined	not determined	not determined
Firing point	not determined	not determined	not determined	not determined
Steam pressure	not determined	not determined	not determined	not determined
Relative density	not determined	not determined	not determined	not determined
Solubility	not determined	not determined	not determined	not determined
Viscosity	not determined	not determined	not determined	not determined
Explosive properties	not determined	not determined	not determined	not determined
Oxidizing properties	not determined	not determined	not determined	not determined
Explosion limits	not determined	not determined	not determined	not determined

Aggregate state	<b>Solution 5</b>			
Color	liquid			
Odor	colorless			
Melting point	odorless			
Boiling point	not determined			
Inflammability	not determined			
Firing point	not determined			
Steam pressure	not determined			
Relative density	not determined			
Solubility	not determined			
Viscosity	not determined			
Explosive properties	not determined			
Oxidizing properties	not determined			
Explosion limits	not determined			

## 9.2 Other information: none

## 10. Stability and reactivity

	<b>Solution 1</b>	<b>Solution 2</b>
<b>Reactivity</b>	the product has not been tested	the product has not been tested
<b>Chemical stability</b>	stable when properly stored and handled	stable when properly stored and handled
<b>Thermal decomposition / conditions to be avoided</b>	no decomposition if used according to specifications	no decomposition if used according to specifications
<b>Possibility of hazardous reactions</b>	reactions with strong oxidizing agents	reactions with strong oxidizing agents
<b>Conditions to avoid</b>	avoid strong heating, no further relevant information available	avoid strong heating, no further relevant information available
<b>Incompatible materials</b>	oxidizing agents	oxidizing agents
<b>Hazardous decomposition products</b>	carbon monoxide and carbon dioxide, nitrous gases, hydrogen chloride (HCl)	carbon monoxide and carbon dioxide, nitrous gases, hydrogen chloride (HCl)
	<b>Solution 3</b>	<b>Solution 4</b>
<b>Reactivity</b>	the product has not been tested	the product has not been tested
<b>Chemical stability</b>	stable when properly stored and handled	stable when properly stored and handled
<b>Thermal decomposition / conditions to be avoided</b>	no decomposition if used according to specifications	no decomposition if used according to specifications
<b>Possibility of hazardous reactions</b>	reactions with strong oxidizing agents	reactions with strong oxidizing agents
<b>Conditions to avoid</b>	avoid strong heating, no further relevant information available	avoid strong heating, no further relevant information available
<b>Incompatible materials</b>	oxidizing agents	oxidizing agents
<b>Hazardous decomposition products</b>	carbon monoxide and carbon dioxide, nitrous gases, hydrogen chloride (HCl)	carbon monoxide and carbon dioxide, nitrous gases, hydrogen chloride (HCl)
	<b>Solution 5</b>	
<b>Reactivity</b>	the product has not been tested	
<b>Chemical stability</b>	stable when properly stored and handled	
<b>Thermal decomposition / conditions to be avoided</b>	no decomposition if used according to specifications	
<b>Possibility of hazardous reactions</b>	reactions with strong oxidizing agents	
<b>Conditions to avoid</b>	avoid strong heating, no further relevant information available	
<b>Incompatible materials</b>	oxidizing agents	
<b>Hazardous decomposition products</b>	carbon monoxide and carbon dioxide, nitrous gases, hydrogen chloride (HCl)	

## 11. Toxicological Information (based on individual ingredients of the solution(s))

### p-Nitrophenole

#### Dangerous health effects

**Skin contact:** Risk of absorption through the skin.

**On contact with eyes:** irritation

**Inhalation of the powder:** mucous membrane irritation

**Ingestion:** Irritation to the oral mucosa, throat, esophagus and intestinal tract.

**Additional toxicological information:** After ingestion of large quantities: vomiting, stomach pain, breathing problems Blood changes, anxiety, convulsions, liver, kidney, heart and circulatory dysfunction. Other hazardous properties cannot be excluded.

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**Sodium dodecyl sulfate  
(SDS)**

**Dangerous health effects**

**Primary irritation:**

**On the skin:** irritating to skin and mucous membranes.

**On the eye:** strong irritation with danger of serious eye damage.

**After inhalation:** Mucosal irritation, cough, dyspnoea. May cause drowsiness or dizziness.

**After swallowing:** Irritations in the mouth, throat, esophagus, gastrointestinal tract.

**After absorption:** drop in blood pressure, fatigue.

**Sensitization:** no sensitizing effects known.

**Specific target organ toxicity:**

**In case of single exposure:** may cause respiratory irritation.

**In case of repeated exposure:** The substance or mixture is classified as non-target-toxic.

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**Sodium chloride  
(NaCl)**

**Dangerous health effects**

**On the skin:** skin irritation after prolonged or repeated exposure.

**On the eye:** slight irritation.

**After inhalation:** slight irritation

**Sensitization:** no sensitizing effects known.

**Aspiration hazard:** no data available.

**Specific target organ toxicity:**

**In case of single exposure:** the substance or mixture is classified as non-target-toxic.

**In case of repeated exposure:** the substance or mixture is classified as non-target-toxic.

**Additional toxicological information:** After swallowing: nausea, vomiting.

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**Sodium hydrogen phosphate  
(NaHPO<sub>4</sub>)**

**Dangerous health effects**

**On the skin:** repeated or prolonged contact may cause skin irritation

**On the eye:** slight irritation.

**After inhalation:** in case of massive exposure to dust the respiratory tract can become irritated.

**Sensitization:** no sensitizing effects known.

**Aspiration hazard:** no classification for aspiration toxicity.

**Specific target organ toxicity:**

**In case of single exposure:** the substance or mixture is classified as non-target-toxic.

**In case of repeated exposure:** the substance or mixture is classified as non-target-toxic.

**Additional toxicological information:** After swallowing large quantities: gastrointestinal disturbances, nausea, vomiting.

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**Di-Sodium hydrogen  
phosphate  
(Na<sub>2</sub>HPO<sub>4</sub>)**

**Dangerous health effects**

**On the skin:** prolonged or repeated contact can cause skin irritation.

**On the eye:** Irritation possible with intensive exposure

**After inhalation:** no data available.

**Sensitization:** no sensitizing effects known.

**Specific target organ toxicity:**

**In case of single exposure:** the substance or mixture is classified as non-target-toxic.

**In case of repeated exposure:** the substance or mixture is classified as non-target-toxic.

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**Potassium chloride  
(KCl)**

**Dangerous health effects**

**On the skin:** slight irritation.

**On the eye:** slight irritation.

**After inhalation:** no irritant effect.

**Sensitization:** no sensitizing effects known

**Reproductive toxicity and aspiration:** no specific effects or hazards

known.

**Specific target organ toxicity:**

**In case of single exposure:** the substance or mixture is classified as non-target-toxic.

**In case of repeated exposure:** the substance or mixture is classified as non-target-toxic.

**Additional toxicological information:** After swallowing large quantities: nausea, vomiting, cardiac arrhythmia, cardiovascular disorders.

## 12. Ecological information

Potential damages unknown. Do not empty into drains / groundwater / soil.

## 13. Disposal considerations

Used solutions and solutions that are past life must be disposed of as hazardous waste, it is to follow the local guidelines; do not release to drains, groundwater and/or soil.

## 14. Transport information

Not classified in transport of dangerous goods

## 15. Regulatory information

### 15.1 Safety, health and environmental regulations/specific legislation for the substances or mixture.

National regulations: no

Restriction of occupation: no

### 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out

## 16. Other information

All chemicals are potentially dangerous. Therefore they have to be handled only by specially trained personnel with the necessary care. Although certain hazards are described herein, we cannot guarantee that these are the only hazards. This information is based on our present knowledge; however, it offers no assurance of product properties and establishes no contract legal rights. To our experience and the information provided the product does not have any harmful effects when used and handled according to specifications.