

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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SemenFru

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

Product Name: SemenFru **Product Code:** ZR10200

Application: Determination of the fructose-content in the seminal fluid

In vitro diagnostics

Company: ANTIGENES, Hustadtring 151, 44801 Bochum, Germany

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ANTIGENES, Hustadtring 151, 44801 Bochum, Germany **Distribution:**

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.

Trichloroacetic acid (TCA)

Corrosive

Harmful

Environmental Hazard

Special risks and safety tips

R35 Causes severe burns.

R50/R53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

S36/S37/S39 Wear suitable protective clothing, gloves and eye/face protection. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S60 This material and its container must be disposed of as hazardous waste. S61 Avoid release to the environment. Refer to special instructions/ Safety data sheets.

Hazard and safety instructions

H314 Causes severe skin burns and eye damage.

H410 Very toxic to aquatic life with long lasting effects.

P273 Avoid release to the environment.

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

P301/P330/P331 If swallowed: rinse mouth. Do NOT induce vomiting. P305/P351/P338 If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P309/P310 If exposed or if you feel unwell: Immediately call a POISON CENTER or doctor.

Sodium hydroxide

Special risks and safety tips

R35 Causes severe burns.

Hazard and safety instructions H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

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

P301/P330/P331 If swallowed: rinse mouth. Do NOT induce vomiting. P305/P351/P338 If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.





P310 Immediately call a POISON CENTER or doctor.

Indole







Environmental Hazard

Harmful

Special risks and safety tips

R21/22 Harmful in contact with skin and if swallowed.

R41 Risk of serious damage to eyes.

R50 Very toxic to aquatic organisms.

Hazard and safety instructions

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H318 Causes serious eve damage.

H400 Very toxic to aquatic life.

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

P301/P330/P331 If swallowed: rinse mouth. Do NOT induce vomiting.

P305/P351/P338 If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor.

P273 Avoid release to the environment.

Hydrochloric acid

Special risks and safety tips

R34 Causes burns.

R37 Irritating to respiratory system.

S1/S2 Keep locked up and out of the reach of children.

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

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).



H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

P234 Keep only in original packaging.

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

P280 Wear protective gloves/protective clothing/eve protection/face protection. P303/P361/P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304/P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305/P351/P338 If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P309/P311 IF exposed or if you feel unwell: Call a POISON CENTER or doctor or

P501 Dispose of contents/container to ...

Fructose

Special risks and safety tips

no R- and S-Phrases

Hazard and safety instructions

no H- and P-phrases

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 and information on ingredients

Components	Reagents	CAS-Code	Quantity
Solution 1	Trichloroacetic acid	76-03-9	not specified
Solution 2	Indole	120-72-9	not specified
Solution 3	Hydrochloric acid	7647-01-0	not specified
Solution 4	Sodium hydroxide	1310-73-2	not specified
Solution 5	Fructose	57-48-7	not specified

4. First aid measures

Description of first aid measures

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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				
Color				
Odor				
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
	Solution 5			

	Solution 5
Aggregate state	
Color	
Odor	
Melting point	not determined
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

•	Solution 1	Solution 2
Reactivity	the product has not been tested	the product has not been tested
Chemical stability	stable when properly stored and handled	stable when properly stored and handled
Thermal decomposition /	no decomposition if used according to	no decomposition if used according to
conditions to be avoided	specifications	specifications
Possibility of hazardous	reactions with strong oxidizing agents	reactions with strong oxidizing agents
reactions		
Conditions to avoid	avoid strong heating no further relevant	avoid strong heating no further relevant
	information available	information available
Incompatible materials	oxidizingagents	oxidizingagents
Hazardous decomposition	carbon monoxide and carbon dioxide, nitrous	carbon monoxide and carbon dioxide, nitrous
products	gases, hydrogen chloride (HCl)	gases, hydrogen chloride (HCl)
•		
	Solution 3	Solution 4
Reactivity	the product has not been tested	the product has not been tested
Chemical stability	stable when properly stored and handled	stable when properly stored and handled
Thermal decomposition /	no decomposition if used according to	no decomposition if used according to
conditions to be avoided	specifications	specifications
Possibility of hazardous	reactions with strong oxidizing agents	reactions with strong oxidizing agents
reactions		
Conditions to avoid	avoid strong heating no further relevant	avoid strong heating no further relevant
	information available	information available
Incompatible materials	oxidizingagents	oxidizingagents
Hazardous decomposition	carbon monoxide and carbon dioxide, nitrous	carbon monoxide and carbon dioxide, nitrous
products	gases, hydrogen chloride (HCl)	gases, hydrogen chloride (HCl)
	0.1.1.	
	Solution 5	
Reactivity	the product has not been tested	
Chemical stability	stable when properly stored and handled	
Thermal decomposition /	no decomposition if used according to	
conditions to be avoided	specifications	
Possibility of hazardous	reactions with strong oxidizing agents	
reactions		
Conditions to avoid	avoid strong heating, no further relevant	
	information available	
Incompatible materials	oxidizingagents	
Hazardous decomposition	carbon monoxide and carbon dioxide, nitrous	
products	gases, hydrogen chloride (HCl)	

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

Trichloroacetic acid (TCA)

Dangerous health effects

On the skin: strong caustic effect on skin and mucous membranes.

On the eye: burns, risk of blindness.

After inhalation: burns of mucous membranes, coughing, dyspnoea.

After swallowing: burns in the mouth, pharynx, esophagus and gastrointestinal

tract. Risk of Perforation. **Primary irritant effect**

Skin: burns.

Eyes: severe irritations.

Sensitization: no sensitizing effect known.

Sodium hydroxide

Dangerous health effects

May cause irritation through to the skin, eyes and mucous membranes.

Through contact with the eyes: serious injuries.

If swallowed: nausea, vomiting, gastro-intestinal disorders.

By administration of large amounts: cardiovascular disorders, liver disorders,

kidney problems.

Indole **Dangerous health effects**

Acute toxicity

Orally Category 4 Skin Category 3

Inhalation: based on available data the classification

criteria are not fulfilled.

LD 50Dermal: 90 mg / kg (rabbit)

Skin corrosion / irritation to the skin: no data

available.

c) Serious eye damage / eye irritation.

Category 1

Respiratory / skin, respiratory tract, skin: no data

The toxicological properties have not been fully investigated. For complete information, see entry in

RTECS.

Symptoms / effects, acute and delayed: rapidly absorbed through the skin. May be harmful if

absorbed through the skin.

Hydrochloric acid

Dangerous health effects

Acute toxicity.

Quantitative data on the toxicity of this product are not available.

Primary irritant effect

On the skin: irritant to skin and mucous membranes.

On the eye: burns, risk of blindness.

After inhalation: mucosal irritations, coughing, dyspnoea.

Sensitization: no sensitizing effect known.

Systemic effects: cardiovascular disorders latency to onset of action.

Aspiration hazard: no classification in terms of aspiration.

Specific target organ toxicity

Single exposure: may cause respiratory irritation.

Repeated exposure: the substance or mixture is not classified as specific target

organ toxicant.

Additional toxicological information: if ingested, severe burns of the mouth and

throat and to the danger of perforation of the esophagus and stomach. **Systemic effects**: cardiovascular disorders latency to onset of action.

Fructose

Dangerous health effects

Acute toxicity: quantitative data on the toxicity of this product are not available.

Primary irritant effect.

Skin: no information available Eyes: no information available. Inhalation: no information available. **Sensitization**: no sensitizing effect known. Additional toxicological information

When used and handled according to specifications, the product has to our

experience and the information provided no harmful effects.

12. Ecological information

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

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.

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.

Page 6 of 6