

# Safety Data Sheet

## Human GaA ELISA Kit

**Cat#: orb777549**

**Revision Date:** July 23, 2018

**Creation Date:** July 23, 2018

### 1. Identification

**Product name:** Human GaA ELISA Kit

**Catalog No.:** orb777549

**Identified uses:** For research use only

### 2. Hazard Identification

#### 2.1 Classification of the substance or mixture

Not classified.

#### 2.2 GHS label elements, including precautionary statements

**Pictogram(s)** No symbol.

**Signal word** No signal word

**Hazard statement(s)** none

**Precautionary statement(s)**

**Prevention** none

**Response** none

**Storage** none

**Disposal** none

#### 2.3 Other hazards which do not result in classification

no data available

### 3. Composition/information on ingredients

#### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Water	Water	7732-18-5	231-791-2	78. 39%
Sodium chloride	Sodium chloride	7647-14-5	231-598-3	14. 16%

Sucrose	Sucrose	5EK7-50-1	200-334-9	2.28%
Poly (oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ -hydroxy-Ethane-1,2-diol, ethoxylated	Poly (ethylene glycol) - 4000	25322-68-3	500-038-2	1.33%
Potassium sodium tartrate tetrahydrate	Potassium sodium tartrate tetrahydrate	6381-59-5	613-385-0	1.07%
Potassium chloride	Potassium chloride	7447-40-7	231-211-8	0.81%
Disodium phosphate dodecahydrate	Disodium hydrogen phosphate	10039-32-4	600-088-6	0.63%
Glycerol	Glycerol	56-81-5	200-289-5	0.51%
Trisodium citrate	Sodium citrate	68-04-2	200-675-3	0.42%
Polyvinyl pyrrolidone	PVP40	9003-39-8	618-363-4	0.35%
Potassium dihydrogen orthophosphate	Potassium dihydrogen phosphate	7778-77-0	231-913-4	0.05%

#### 4. First-Aid Measures

Description of first aid measures:

**General advice** Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance. **If inhaled** Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical. **Following skin contact** Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor. **Following eye contact** Rinse with pure water for at least 15 minutes. Consult a doctor. **Following ingestion** Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed: no data available

Indication of immediate medical attention and special treatment needed, if necessary: no data available

#### 5. Firefighting measures

Extinguishing media:

**Suitable extinguishing media** Use dry chemical, carbon dioxide or alcohol-resistant foam.

Special hazards arising from the substance or mixture:

no data available

Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions:

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up:

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

## 7. Handling and storage

Precautions for safe handling:

Handling in a well-ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

Conditions for safe storage, including any incompatibilities:

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

## 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure limit values

<b>Component</b>	Sodium chloride			
<b>CAS No.</b>	7647-14-5			
	<b>Limit value - Eight hours</b>		<b>Limit value - Short term</b>	
	<b>ppm</b>	<b>mg/m<sup>3</sup></b>	<b>ppm</b>	<b>mg/m<sup>3</sup></b>
<b>Latvia</b>		5		
	<b>Remarks</b>			

<b>Component</b>	Sucrose			
<b>CAS No.</b>	57-50-1			
	<b>Limit value - Eight hours</b>		<b>Limit value - Short term</b>	
	<b>ppm</b>	<b>mg/m<sup>3</sup></b>	<b>ppm</b>	<b>mg/m<sup>3</sup></b>

<b>Component</b>	Sucrose			
<b>CAS No.</b>	57-50-1			
<b>Australia</b>		10 (1)		
<b>Belgium</b>		10		
<b>Canada - Ontario</b>		10		
<b>Canada - Québec</b>		10		
<b>France</b>		10		
<b>Ireland</b>		10		20 (1)
<b>New Zealand</b>		10 (1)		
<b>Singapore</b>		10		
<b>South Korea</b>		10		
<b>Spain</b>		10		
<b>USA - NIOSH</b>		10 total dusts		
		5 respirable fractions		
<b>USA - OSHA</b>		15 inhalable aerosols		
		5 respirable aerosols		
<b>United Kingdom</b>		10		20
	<b>Remarks</b>			
<b>Australia</b>	(1) This value is for inhalable dust containing no asbestos and			
<b>Ireland</b>	(1) 15 minutes reference period			
<b>New Zealand</b>	(1) The value for inhalable dust containing no asbestos and less than 1% free silica.			

<b>Component</b>	Potassium chloride			
<b>CAS No.</b>	7447-40-7			
	<b>Limit value - Eight hours</b>		<b>Limit value - Short term</b>	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
<b>Latvia</b>		5		
	<b>Remarks</b>			

<b>Component</b>	Glycerol			
<b>CAS No.</b>	56-81-5			
	<b>Limit value - Eight hours</b>		<b>Limit value - Short term</b>	
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
<b>Australia</b>		10 (1)		
<b>Belgium</b>		10		
<b>Canada - Ontario</b>		10		

Canada - Québec		10		
Finland		20		
France		10		
Germany (AGS)		200 (1)		400 (1)(2)
Germany (DFG)		200 (1)		400 (1)(2)
Ireland		10		
New Zealand		10 (1)		

Component	Glycerol			
CAS No.	56-81-5			
Poland		10		
Singapore		10		
South Korea		10		
Spain		10		
Switzerland		50 inhalable aerosols		100 inhalable aerosols
USA - OSHA		15 inhalable dusts		
		5 respirable dusts		
United Kingdom		10		
	<b>Remarks</b>			
Australia	(1) This value is for inhalable dust containing no asbestos and			
Germany (AGS)	(1) Inhalable fraction (2) 15 minutes average value			
Germany (DFG)	(1) Inhalable fraction (2) 15 minutes average value			
New Zealand	(1) The value for inhalable dust containing no asbestos and less than 1% free silica.			

## 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

## 8.3 Individual protection measures, such as personal protective equipment (PPE)

### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

### Thermal hazards

no data available

## 9. Physical and chemical properties

<b>Physical state</b>	colorless liquid
<b>Colour</b>	no data available
<b>Odour</b>	no data available
<b>Melting point/ freezing point</b>	0 °C
<b>Boiling point or initial boiling point and boiling range</b>	100°C(lit.)
<b>Flammability</b>	no data available
<b>Lower and upper explosion limit / flammability limit</b>	no data available
<b>Flash point</b>	100°C
<b>Auto-ignition temperature</b>	no data available
<b>Decomposition temperature</b>	no data available
<b>pH</b>	no data available
<b>Kinematic viscosity</b>	no data available
<b>Solubility</b>	no data available
<b>Partition coefficient n-octanol/water</b>	no data available
<b>Vapour pressure</b>	3 mm Hg (37 °C)
<b>Density and/or relative density</b>	1.000g/mL at 3.98°C(lit.)
<b>Relative vapour density</b>	<1 (vs air)
<b>Particle characteristics</b>	no data available

## 10. Stability and reactivity

### 10.1 Reactivity

no data available

### 10.2 Chemical stability

no data available

### 10.3 Possibility of hazardous reactions

no data available

### 10.4 Conditions to avoid

no data available

### 10.5 Incompatible materials

Explore. Bioreagents.

no data available

## 10.6 Hazardous decomposition products

no data available

## 11. Toxicological information

### Acute toxicity

- Oral: no data available
- Inhalation: no data available
- Dermal: no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

no data available

### Reproductive toxicity

no data available

### STOT-single exposure

no data available

### STOT-repeated exposure

no data available

### Aspiration hazard

no data available

## 12. Ecological information

### 12.1 Toxicity

- **Toxicity to fish: no data available**
- **Toxicity to daphnia and other aquatic invertebrates: no data available**
- **Toxicity to algae: no data available**
- **Toxicity to microorganisms: no data available**

## 12.2 Persistence and degradability

no data available

## 12.3 Bioaccumulative potential

no data available

## 12.4 Mobility in soil

no data available

## 12.5 Other adverse effects

no data available

## 13. Disposal considerations

### 13.1 Disposal methods

#### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

#### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

## 14. Transport information

### 14.1 UN Number

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

### 14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

### 14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

### 14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

### 14.5 Environmental hazards

ADR/RID: No    IMDG: No    IATA: No

### 14.6 Special precautions for user

no data available

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available



## 15. Regulatory information

### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Water	Water	7732-18-5	231-791-2
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
Chemical name	Common names and synonyms	CAS number	EC number
Sodium chloride	Sodium chloride	7647-14-5	231-598-3
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
Chemical name	Common names and synonyms	CAS number	EC number
Sucrose	Sucrose	57-50-1	200-334-9
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.

<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Poly(oxy- 1,2-ethanediyl), $\alpha$ -hydro- $\omega$ -hydroxy-Ethane- 1,2-diol, ethoxylated	Poly (ethylene glycol) - 4000	25322-68- 3	500-038-2
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Potassium sodium tartrate tetrahydrate	Potassium sodium tartrate tetrahydrate	6381-59-5	613-385-0
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Potassium chloride	Potassium chloride	7447-40-7	231-211-8
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.

<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
disodium hydrogen phosphate	disodium hydrogen phosphate	10039-32-4	600-088-6
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Glycerol	Glycerol	56-81-5	200-289-5
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Trisodium citrate	Sodium citrate	68-04-2	200-675-3
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.

<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Polyvinyl pyrrolidone	PVP40	9003-39-8	618-363-4
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Potassium dihydrogen orthophosphate	Potassium dihydrogen phosphate	7778-77-0	231-913-4
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.

## 16. Other information

### Abbreviations and acronyms

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

Explore. Bioreagents.

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

## References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>