

Material Safety Data Sheet (MSDS)

ARG80755 Rat Estradiol ELISA Kit

Version: 2017/08/04

1. Product and Company Identification

Product Catalog No: ARG80755

Product Name: Rat Estradiol ELISA Kit

Supplier: Arigo Biolaboratories Corp.

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2. Composition / Information on Ingredients

Description of the mixture:

Mixture of nonhazardous substances, with additions listed below.

Component number	Component name	Volume	Safety Information
1	Antibody-coated microplate	12 x 8 strips	No hazards
2	Standards	6 vials (lyophilized)	Contains < 0.01% Thimerosal
3	Incubation Buffer	7 ml (ready to use)	No hazards
4	100X HRP conjugated Estradiol	0.3 ml	Contains < 0.0015% ProClin® 300
5	HRP conjugated Estradiol Diluent	30 ml (ready to use)	Contains < 0.01% Thimerosal
6	10X Wash buffer	50 ml	Contains < 0.0015% ProClin® 300
7	TMB substrate	22 ml (ready to use)	Contains < 0.0015% ProClin® 300
8	STOP solution	7 ml (ready to use)	Contains 2N Hydrochloric Acid

Hazardous ingredients:

Chemical name	CAS No. (EC No.) [Index No.]	Amount in the mixture	Classification according to Regulation (EC) No 1272/2008 [CLP] (related to the concentrated form)		Pictogram, Signal Word Code(s)	Specific Conc. Limits, M-factors	Classification according to Directive 67/548/EEC (related to the concentrated form)
			Hazard class/ Hazard categories	Hazard-statement			
Thimerosal	54-64-8 (200-210-4) [080-004-00-7]	< 0.01%	Acute Tox. 2 * Acute Tox. 1 Acute Tox. 2 * STOT RE 2 * Aquatic Acute 1 Aquatic Chronic 1	H330 H310 H300 H373 ** H400 H410	GHS06 GHS08 GHS09 Dgr	* STOT RE 2; H373: C ≥ 0,1 %	T+; R26/27/28: C ≥ 2 % T; R23/24/25: 0,5 % ≤ C < 2 % Xn; R20/21/22: 0,05 % ≤ C < 0,5 % R33: C ≥ 0,05 %

*Dilution is not classified as hazardous according to the European Regulation 67/548/EEC and 1999/45/EC or 1272/2008/EC.

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ProClin® 300 *	55965-84-9 (---) [613- 167-00-5]	< 0.0015%*	Acute Tox. 3 * Acute Tox. 3 * Acute Tox. 3 * Skin Corr. 1B Skin Sens. 1 Aquatic Acute 1 Aquatic Chronic 1	H331 H311 H301 H314 H317 H400 H410	GHS06 GHS05 GHS09 Dgr	Skin Corr. 1B; H314: C ≥ 0,6 % Skin Irrit. 2; H315: 0,06 % ≤ C < 0,6 % Eye Irrit. 2; H319: 0,06 % ≤ C < 0,6 % Skin Sens. 1; H317: C ≥ 0,0015 %	T; N R: 23/24/25- 34-43- 50/53 S: (2-)26-28- 36/37/ 39-45-60-61
* Ingredient of ProClin® 300: ProClin® 300 are mixtures of substances, amongst others including the components 5-chloro-2-methyl-4-isothiazolin-3-one (CIT) [EC no. 247-500-7] and 2-methyl-4-isothiazolin-3-one [EC no. 220-239-6] (MIT) (3:1) *Dilution is not classified as hazardous according to the European Regulation 67/548/EEC and 1999/45/EC or 1272/2008/EC.							
Hydrochloric Acid	7647-01-0 [231-595-7]	< 5.0 %*	Skin Corr. 1B STOT SE 3	H314 H335	GHS05 GHS07 Dgr	Skin Corr. 1B; H314: C ≥ 25 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 % STOT SE 3; H335: C ≥ 10 %	C; R34-37: C ≥ 25 % Xi; R36/37/38: 10 % ≤ C < 25 %
*Dilution is not classified as hazardous according to the European Regulation 67/548/EEC and 1999/45/EC or 1272/2008/EC.							

Full text of R-, and H-phrases: see section 16.

Not listed single components contain no hazardous substances in concentrations to be declared.

3. Hazards Identification

Classification of the substance or mixture

Due to the low concentration of hazardous ingredients none of the listed components of this product may be classified as dangerous according to Directive 1999/45/EC, 67/548/EEC and Regulation (EC) 1272/2008.

Label elements

This product is not under labeling according to Regulation (EC) n. 1272/2008.

Other hazards

Stop Solution and Substrate Solution

An irritant effect to the skin cannot be ruled out because of the pH value.

A corrosive effect to the eye cannot be ruled out because of the pH value.

Note: this product is intended for laboratory use by professional uses only. Use appropriate personal protective equipment while working with the reagents provided.

4. First Aid Measures

Description of first aid measures

General information	No special measures required. Consult physician in case of complaints.
Following inhalation	Supply fresh air
Following skin contact	Immediately flush skin with plenty of water. Cold water may be used. Remove contaminated clothing and shoes.
Following eye contact	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used.
Following swallowing	If swallowed, rinse mouth with plenty of water.

Most important symptoms and effects, both acute and delayed

To our present state of knowledge no symptoms or risks are known.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing agents:

Use dry chemical powder, water spray or alcohol resistant foam

Unsuitable extinguishing media:

None

Special hazards arising from the substance or mixture

Hazardous combustion products:

To the best of our knowledge, no special hazards can be defined.

Advice for firefighters

No special measures required.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use appropriate personal protective equipment.

Environmental precautions

Dilute with plenty of water.

Do not allow to enter surface or ground water.

Methods and material for containment and cleaning up

Absorb with liquid-binding material.

Dispose contaminated material as waste according to section 13.

Reference to other sections

See section 8 for information on personal protection equipment.

See section 13 for disposal information.

7. Handling and Storage

Precautions for safe handling

- Use all reagents in accordance with the relevant instruction for use.
- Observe laboratory safety regulations.

- Do not eat, drink, smoke or apply cosmetics in areas where kit reagents are handled.
- Wear disposable latex gloves when handling reagents.
- Handling should be done in accordance with the procedures defined by an appropriate national biohazard safety guideline or regulation.

Conditions for safe storage, including any incompatibilities

- Store all reagents as directed in the relevant package insert provided with the product.
- Protect TMB-Substrate Solution from UV light

Specific end use

This product is intended for laboratory use by professional users only. (For research use only)

8. Exposure Controls / Personal Protection

Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Exposure controls

General hygiene directives should be considered.

Keep away from foodstuffs and beverages. Wash hands before breaks and at the end of the working day.

Personal protective equipment

Respiratory protection: Not required.

Hand protection: Protective gloves of nitrile rubber or nature latex, satisfying the norm DIN EN 455.

Eye protection: Safety glasses with side shields conforming to EN 166 (EU), NIOSH (US).

Skin protection: Impenetrable protective clothing.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

	Master Calibrator	Enzyme Conjugate	TMB substrate	Calibrator/Sa mple Diluent	Wash Buffer	Stop Solution
Appearance						
The physical state	Liquid					
Colour	colorless	red	colorless	colorless	colorless	colorless
Odour	odourless					
Odour threshold	no data available					
pH	7.4 ± 0.05	7.4 ± 0.05	3.6 – 3.8	7.4 ± 0.05	7.4 ± 0.05	< 1.0
Melting point/freezing point	no data available					
Initial boiling point and boiling range	no data available					
Flash point	no data available					
Evaporation rate	no data available					
Flammability (solid, gas)	no data available					
Upper/lower flammability or explosive limits	no data available					

Vapour pressure	no data available
Vapour density	no data available
Relative density	no data available
Solubility(ies)	no data available
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	Product is not self-igniting
Decomposition temperature	no data available
Viscosity	no data available
Explosive properties	Product does not present an explosion hazard
Oxidising properties	no data available

Other information

No other information available.

10. Stability and Reactivity

Reactivity: No data available.

Chemical stability: No data available.

Possibility of hazardous reactions: No data available.

Conditions to avoid: TMB Substrate Solution: Protect from direct UV light, avoid elevated temperatures.

Incompatible materials: No materials known.

Hazardous decomposition products: No dangerous decomposition products known.

11. Toxicological Information

Information on toxicological effects

Acute toxicity: No data available.

Skin corrosion/irritation: Inconclusive data. Due to its low pH value an irritant effect to the skin cannot be ruled out for Substrate Solution and Stop Solution.

Serious eye damage/irritation: Inconclusive data. Due to its low pH value a corrosive effect cannot be ruled out for Substrate Solution and Stop Solution.

Corrosivity: Sulfuric acid induces tissue injury after contact.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Repeated dose toxicity: No data available.

Carcinogenicity: No data available.

Reproductive toxicity: No data available.

Mutagenicity: No data available.

Toxicity for reproduction: No data available.

Specific target organ toxicity-single exposure: No data available.

Specific target organ toxicity-repeated exposure: No data available.

Aspiration hazard: No data available.

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

12. Ecological Information

Toxicity: No further relevant information available.

Persistence and degradability: No further relevant information available.

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Results of PBT and vPvB assessment: Not applicable.

Other adverse effects: No further relevant information available.

13. Disposal Considerations

Waste treatment methods

Product:

Recommendation: Dispose of waste according to applicable local, state, and federal regulations.

Uncleaned packaging:

Recommendation: Dispose of waste according to applicable local, state, and federal regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

14. Transport Information

No hazardous material as defined by the transport regulations (ADR/RID, IMDG Code, ICAO TI/IATA DGR).

UN number: None

UN proper shipping name: None

Transport hazard class(es): None

Packing group: None

Environmental hazards: None

Special precautions for user: Not applicable.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.

15. Regulatory Information

This Safety Data Sheet is according to:

1907/2006/EC: Registration, evaluation and authorization of chemicals regulation (REACH)

1272/2008/EC: Classification, labelling and packaging regulation (CLP, globally harmonized system GHS)
replaces 67/548/EEC and 1999/45/EC, amending 1907/2006/EC

453/2010/EC: Compilation of safety data sheets regulation (SDS), amending 1907/2006/EC

Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available.

Chemical safety assessment

Not applicable.

16. Other Information

"H code" and "R Phrases" used in this Safety data sheet

Reg. 1272/2008	Dir. 67/548/EEC	
H300	-	Fatal if swallowed.
H301	-	Toxic if swallowed.
H310	-	Fatal in contact with skin.
H311	-	Toxic in contact with skin.

H314	-	Causes severe skin burns and eye damage.
H315	-	Cause skin irritation.
H317	-	May cause an allergic skin reaction.
H319	-	Cause serious eye irritation.
H330	-	Fatal if inhaled.
H331	-	Toxic if inhaled.
H335	-	May cause respiratory irritation.
H373	-	May cause damage to organs (or 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.
H410	-	Very toxic to aquatic life with long lasting effects.
-	R20/21/22	Harmful by inhalation, in contact with skin and if swallowed
-	R23/24/25	Toxic by inhalation, in contact with skin and if swallowed.
-	R26/27/28	Very toxic by inhalation, in contact with skin and if swallowed.
-	R33	Danger of cumulative effects.
-	R34	Causes burns.
-	R37	Irritating to respiratory system.
-	R36/37/38	Irritating to eyes, respiratory system and skin.
-	R43	May cause sensitization by skin contact.
-	R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

“P statements” and “S Phrases” used in this Safety data sheet

Reg. 1272/2008	Dir. 67/548/EEC	
-	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
-	S28	After contact with skin, wash immediately with plenty of ... (to be specified by the manufacturer)
-	S36/37	Wear suitable protective clothing and gloves.
-	S39	Wear 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/or its container must be disposed of as hazardous waste
-	S61	Avoid release to the environment. Refer to special instructions safety data sheet

Notice to reader: To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Data compared to the previous version altered.
