SECTION 1- SUBSTANCE IDENTITY AND COMPANY INFORMATION

Identification of the substance/preparation

Product Name: Arginine Vasopressin Receptor 2 (AVPR2) ACTOne™ Stable Cell Line
Product Catalog: CL-01-AVPR2

Company/Undertaking Identification

Company: eEnzyme LLC
Address: 401 Professional Drive, Suite 160
Gaithersburg, MD 20879, USA
Telephone Number: +1-240-683-5851
24 hour Emergency Response: 800-919-0755
240-683-5853

SECTION 2- HAZARDS IDENTIFICATION

HMIS Rating
Health: 0      Flammability:0      Reactivity:0

NFPA Rating
Health: 0      Flammability:0      Reactivity:0

This substance is not hazardous as defined by OSHA 29CFR 1910.1200 however this product should be handled according to good lab practices, with proper personal protective equipment, proper engineering controls and within the parameters of the purchaser’s safety program.

Health Hazards

For Biosafety Level 1 Cell Cultures

Handle as a potentially biohazardous material under at least Biosafety Level 1 containment. This cell line is not known to cause disease in healthy adult humans. These cells have NOT been screened for Hepatitis B, human immunodeficiency viruses or other adventitious agents, unless otherwise reported on the Certificate of Analysis. Regardless of results reported on the Certificate of Analysis Universal Precautions according to 29 CFR 1910.1030 should be followed at all times when manipulating these cell lines.

See next page for Biosafety Level 2 cell cultures.

For Biosafety Level 2 Cell Cultures

Handle as a potentially biohazardous material under at least Biosafety Level 2 containment. These cell lines are associated with human disease, hazards include: percutaneous injury, ingestion, mucous membrane exposure (U.S. Government Publication Biosafety in Microbiological and Biomedical
Laboratories). These cells have NOT been screened for Hepatitis B, human immunodeficiency viruses or other adventitious agents, unless otherwise reported on the Certificate of Analysis. Regardless of results reported on the Certificate of Analysis Universal Precautions according to 29 CFR 1910.1030 should be followed at all times when manipulating these cell lines.

SECTION 3- COMPOSITION/INFORMATION ON INGREDIENTS

Either frozen or growing cells shipped in liquid cell culture medium (a mixture of components that may include, but is not limited to: inorganic salts, vitamins, amino acids, carbohydrates and other nutrients dissolved in water). Frozen Cultures may also contain a 5%-10% solution of Dimethyl sulfoxide as a cryoprotectant.

SECTION 4- FIRST AID MEASURES

Skin contact
Wash off immediately with plenty of water. If symptoms persist, call a physician.

Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.

Ingestion
Never give anything by mouth to an unconscious person. If symptoms persist, call a Physician. Do not induce vomiting without medical advice.

Inhalation
Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.

Notes to physician
Treat symptomatically.

SECTION 5- FIRE FIGHTING MEASURES

Suitable extinguishing media

Target Organ Effects
No known effects under normal use conditions.

Special protective equipment for firefighters
Wear self-contained breathing apparatus and protective suit.

SECTION 6- ACCIDENTAL RELEASE MEASURES

Personal precautions
Use personal protective equipment.

HMIS Methods for cleaning up
Soak up with inert absorbent material.
SECTION 7- HANDLING AND STORAGE

Handling
Always wear recommended Personal Protective Equipment.

Storage
Keep in properly labelled containers.

SECTION 8- EXPOSURE CONTROLS/PERSONAL PROTECTION

Use Personal Protective Equipment
Including Eye Protection, Chemical Resistant Gloves, and appropriate clothing to prevent skin exposure. In addition, a Respiratory program that complies with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Engineering Controls
The use and storage of this material requires user to maintain and make available appropriate eyewash and safety shower facilities. Use fume hood or other appropriate ventilation method to keep airborne concentrations as low as possible.

Exposure Limits
No exposure limits for this material have been established by ACGIH, NIOSH, or OSHA.

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form
Liquid

Appearance
No information available

Odor
No information available

Boiling Point/Range
°C no data available
°F no data available

Melting Point/Range
°C no data available
°F no data available

Flash Point
°C no data available
°F no data available

Autoignition temperature
°C no data available
°F no data available

Oxidizing properties
No information available

Water solubility
Soluble

SECTION 10- STABILITY AND REACTIVITY

Stability
Stable.

Materials to avoid
No information available.

Hazardous decomposition
No information available.

Products

Polymerization
Hazardous polymerization does not occur.

SECTION 11- TOXICOLOGICAL INFORMATION

Product name: Arginine Vasopressin Receptor 2 (AVPR2) ACTOne™ Stable Cell Line
Product catalog number: CL-01-AVPR2

www.eEnzyme.com
Acute toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 (oral, rat/mouse)</th>
<th>LD50 (dermal, rat/rabbit)</th>
<th>LC50 (inhalation, rat/mouse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimethyl sulfoxide</td>
<td>14500 mg/kg Oral LD50</td>
<td>no data available</td>
<td>no data available</td>
</tr>
</tbody>
</table>

Principle Routes of Exposure/
Potential Health effects

Eyes: May cause eye irritation with susceptible persons.
Skin: Components of the product may be absorbed into the body through the skin. May cause skin irritation in susceptible persons.
Inhalation: May cause irritation of respiratory tract.

Ingestion: May be harmful if swallowed.
Carcinogenic effects: No information available.
Mutagenic effects: No information available.
Reproductive toxicity: No information available.
Sensitization: No information available.

SECTION 12- ECOLOGICAL INFORMATION

Ecotoxicity effects: Daphnia magna. (Water flea)
Mobility: No information available.
Biodegradation: Inherently biodegradable.
Bioaccumulation: Does not bioaccumulate.

SECTION 13- DISPOSAL CONSIDERATIONS

Decontaminate all wastes before disposal (steam sterilization, chemical disinfection, and/or incineration). Dispose of in accordance with applicable regulations.

SECTION 14- TRANSPORT INFORMATION

Proper shipping name: Not classified as dangerous in the meaning of transport regulations.
Hazard class: None
Subsidiary Class Eyes: None
Packing group: None
UN-No: None

SECTION 15- REGULATORY INFORMATION
Component | TSCA
---|---
Dimethyl sulfoxide 67-68-5 (7-13) | Listed

U.S. Federal Regulations

SARA 313
This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain HAPs.

U.S. State Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts - RTK</th>
<th>New Jersey - RTK</th>
<th>Pennsylvania - RTK</th>
<th>Illinois - RTK</th>
<th>Rhode Island - RTK</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimethyl sulfoxide</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

California Proposition 65
This product does not contain chemicals listed under Proposition 65.

WHMIS Hazard Class
Non-controlled

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

SECTION 16- OTHER INFORMATION

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

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