

# MATERIAL SAFETY DATA SHEET

## SECTION 1- SUBSTANCE IDENTITY AND COMPANY INFORMATION

### Identification of the substance/preparation

Product Name Opioid Receptor Kappa 1 (OPRK1) ACTOne™ Stable Cell Line  
CL-11-OPRK1  
Product Catalog

### 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,

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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

<b>Skin contact</b>	Wash off immediately with plenty of water. If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult a physician.
<b>Ingestion</b>	Never give anything by mouth to an unconscious person. If symptoms persist, call a Physician. Do not induce vomiting without medical advice.
<b>Inhalation</b>	Move to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
<b>Notes to physician</b>	Treat symptomatically.

### SECTION 5- FIRE FIGHTING MEASURES

<b>Suitable extinguishing media</b>	Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical.
<b>Target Organ Effects</b>	No known effects under normal use conditions.
<b>Special protective equipment for firefighters</b>	Wear self-contained breathing apparatus and protective suit.

### SECTION 6- ACCIDENTAL RELEASE MEASURES

<b>Personal precautions</b>	Use personal protective equipment.
<b>HMIS Methods for cleaning up</b>	Soak up with inert absorbent material.

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## SECTION 7- HANDLING AND STORAGE

**Handling  
Storage**

Always wear recommended Personal Protective Equipment.  
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**

<b>Form</b>	Liquid	
<b>Appearance</b>	No information available	
<b>Odor</b>	No information available	
<b>Boiling Point/Range</b>	°C no data available	°F no data available
<b>Melting Point/Range</b>	°C no data available	°F no data available
<b>Flash Point</b>	°C no data available	°F no data available
<b>Autoignition temperature</b>	°C no data available	°F no data available
<b>Oxidizing properties</b>	No information available	
<b>Water solubility</b>	Soluble	

## SECTION 10- STABILITY AND REACTIVITY

<b>Stability</b>	Stable.
<b>Materials to avoid</b>	No information available.
<b>Hazardous decomposition Products</b>	No information available.
<b>Polymerization</b>	Hazardous polymerization does not occur.

## SECTION 11- TOXICOLOGICAL INFORMATION

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**Acute toxicity**

<b>Chemical Name</b>	<b>LD50 (oral, rat/mouse)</b>	<b>LD50 (dermal, rat/rabbit)</b>	<b>LC50 (inhalation, rat/mouse)</b>
dimethyl sulfoxide	14500 mg/kg Oral LD50	no data available	no data available

**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**

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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

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
dimethyl sulfoxide	-	-	-	-	-

#### 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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