# MATERIAL SAFETY DATA SHEET

# SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product name:         α-Ketoglutarate Dehydrogenase (α-KGDH) Activity Assay Kit		
Catalog Number: E-BC-K083-M		
Application:	For research use only	

# **SECTION 2 HAZARDS IDENTIFICATION**

#### Hazards Identification:

According to GHS

Physical hazards: Not Hazardous

Health hazards: Not Hazardous

Environmental hazards: Not Hazardous

# SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

Items	Component	Physical form	Hazardous Ingredient	Concentration	CAS No.
Reagent 1	Extraction Solution	Odorless and colorless, liquid	No hazards	-	-
Reagent 2	Buffer Solution	Odorless and colorless, liquid	No hazards	-	-
Reagent 3	Substrate	Powder	No hazards	-	-
Reagent 4	Chromogenic Agent	Odorless and yellowish, liquid	No hazards	-	-
Reagent 5	Clarificant	Odorless and colorless, liquid	No hazards	-	-
Reagent 6	Standard	Powder	No hazards	_	-

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# **SECTION 4 FIRST-AID MEASURES**

Classification according to GHS

#### 4.1 General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### 4.2 If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### 4.3 In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

#### 4.4 In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### 4.5 If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## **SECTION 5 FIRE FIGHTING MEASURES**

#### 5.1 Suitable extinguishing media

Suitable: Water spray, alcohol-resistant foam, dry chemical, carbon dioxide or appropriate foam.

For small fires, use media such as "alcohol" foam, dry chemical or carbon dioxide.

For large fires, apply water from as far as possible. Use large quantities of water applied as a mist or spray. Solid streams of water may be ineffective. Cool affected containers with flooding quantities of water.

#### 5.2 Special precautions for fire-fighters

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### 5.3 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

#### 6.1 Person-related safety precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

#### 6.2 Measures for environmental protection

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

#### 6.3 Measures for containment and cleaning

Contain spillage, and then collect with non-combustible absorbent material (eg. sand, diatomaceous earth, vermiculite). Place in a container for disposal according to local regulations. Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal. Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local



regulations (see section 13). Keep in suitable, closed containers for disposal.

# SECTION 7 HANDLING AND STORAGE

#### 7.1 Handling

Wear appropriate protective clothing and safety gloves.

Avoid inhalation.

Avoid contact with eyes, skin and clothing.

Mechanical exhaust required.

Keep away from ignition sources, heat and flame.

No smoking at working site.

Incompatibilities: Strong oxidizing agents, Strong acids. Handling and unloading should be light, to prevent packaging broken, damp and cause losses.

Working place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

#### 7.2 Storage

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Keep away from heat, sparks and flame.

Keep away from sources of ignition.

Incompatible: Strong oxidizing agents, Strong acids.

Storage place should be equipped with appropriate varieties and quantities of fire fighting equipment and leakage emergency treatment equipment.

# SECTION 8 EXPOSURE CONTROL/PPE

#### 8.1 Engineering Controls

Mechanical exhaust required. Safety shower and eye bath.

## 8.2 Personal Protective Equipment

Respiratory: Government approved respirator if needed.

Eye/face: Chemical safety goggles if needed.

Clothing: Wear appropriate protective clothing.

Hand/skin: Protective gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection: Wear suitable protective clothing according to the concentration and amount of the substance at the workplace.

## 8.3 Other Protect

No smoking, drinking and eating at working site. Wash thoroughly after handling.

# SECTION 9 PHYSICAL/CHEMIICAL PROPERTIES

Appearance: No data available Odour: No data available Odour threshold: No data available

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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 Water solubility: No data available Partition coefficient: No data available Auto-ignition temperature: No data available Decomposition temperature: No data available Viscosity: No data available Explosive properties: No data available Oxidizing properties: No data available

# SECTION 10 STABILITY AND REACTIVITY

# 10.1 Reactivity No data available 10.2 Chemical stability Stable under recommended storage conditions 10.3 Possibility of hazardous reactions No data available 10.4 Conditions to avoid Heat, flames and sparks 10.5 Incompatible materials Strong oxidizing agent, Light sensitive, Alcohols, Organic materials, Heavy metals, Powdered metals, Strong reducing agents, Amines, Mercaptans. 10.6 Hazardous decomposition products Other decomposition products: No data available Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides,

Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas.

# SECTION 11 TOXICOLOGICAL INFORMATION

## Acute toxicity:

There is no evidence available indicating acute toxicity.

# SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity No data available

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Persistence and degradability No data available Bioaccumulative potential No data available Mobility in soil No data available Results of PBT and vPvB assessment No data available Other adverse effects No data available

# SECTION 13 DISPOSAL CONSIDERATION

#### 13.1 Disposal methods

Dispose of waste in accordance to applicable national, regional, or local regulations. Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

## 13.2 Contaminated packaging

Dispose in the same manner as unused product.

# SECTION 14 TRANSPORT INFORMATION

**RID/ADR:** Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport. **IATA:** Non-Hazardous for Air Transport. **IMO:** Non-Hazardous for Sea Transport.

# SECTION 15 REGULATORY INFORMATION

This material safety data sheet complies with the requirements of Regulation (EC) No. 1272/2008 and its amendments.

# **SECTION 16 OTHER INFORMATION**

IMPORTANT! Read the safety data sheets before the use and disposal of this product. Insure that this information is understood by the operators exposed to this product. Use this product for the intended purpose as indicated in the instruction manual.

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as guide. We make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from this use. Users should make their own investigation to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising from using the above information.

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