# SAFETY DATA SHEET

Date Revised: Nov 30, 2021

## **SECTION 1: Product and Company Identification**

Product Name: YF®594 Tyramide Kit, HRP Streptavidin

Catalog Number: Y6092S, Y6092L

Manufacturer/Supplier:

UElandy (Suzhou) Co., Ltd.

Room 302-1, Building 1, No.18 Chunyao Road, Caohu Industrial Park, Xiangcheng District, Suzhou, P.R. China

None

Phone: 86-512-69571710, mailbox:service@uelandy.com

Web: http://www.uelandy.com

#### **SECTION 2: Hazards identification**

**GHS** - Classification

**Health hazards** 

Signal Word Warning

Physical hazards GHS Physical Hazard 1 - Flammable

GHS Physical Hazard Category 4

**Hazard statements** H227 - Combustible liquid

Precautionary statements P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking

P280 - Wear protective gloves/protective clothing/eye protection/face protection

 $P370 + P378 - In\; case\; of\; fire,\; use\; water/water\; spray/water\; jet/carbon$ 

dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction

WHMIS classification Flammable liquids, category 4

Classification according to Regulation (EC) No 1272/2008[CLP]  $\,$  None

Classification according to Directive 1999/45/EC None

**HMIS Classification** 

Health hazard: 1

Flammability: 2

Physical hazards: 0

**NFPA Rating** 

Health hazard: 1

Fire: 2

Reactivity Hazard: 0

Labeling according to Regulation (EC) No 1272/2008[CLP]

Hazard pictogram None

Signal word None

Hazard statements None

**Precautionary statements** None

## **SECTION 3: Composition/information on ingredients**

Name	CAS No.	EC No.	Index No.	Weight %	Classification	Classification according to
					according to	regulation
					67/548/EEC	(EC)No1278/2008
DMSO	67-68-5	200-664-3	-	>99%	-	None

#### **SECTION 4: First aid measures**

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

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

## In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

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

### **SECTION 5: Firefighting measures**

#### Suitable extinguishing media

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

### Special protective equipment for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

## **SECTION 6: Accidental release measures**

## Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition.

## **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### Methods and materials for containment and cleaning up

Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

## **SECTION 7: Handling and storage**

#### Precautions for safe handling

Avoid inhalation of vapor or mist.

Avoid direct contact with substance.

Conditions for safe storage

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

Store at -20 °C.

## **SECTION 8: Exposure controls/personal protection**

### Components with workplace control parameters

Substance: Dimethylsulfoxide

CAS no. 67-68-5

Country	Austria	Belgium	Denmark	European Union	France	Germany
Limit	160mg/m3	-	160mg/m3	-	-	160mg/m3
value,8hours						
Limit value, short	-	-	320mg/m3	-	-	320mg/m3
term						

Country	Hungary	Italy	Poland	Spain	Sweden	Netherlands	Switzerland
Limit	-	-	-	-	160mg/m3	-	160mg/m3
value,8hours							
Limit value,	-	-	-	-	500mg/m3	-	320mg/m3
short term							

Country	United	USA-NIOSH	USA-OSHA	Australia	Canada	Japan	South Korea
	Kingdom						
Limit		-	-	-	-	-	-
value,8hours							
Limit value,		-	-	-	-	-	-
short term							

## Personal protective equipment

## **Hand protection**

Handle with 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.

## Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## **SECTION 9: Physical and chemical properties**

Chemical Name	YF <sup>®</sup> 594 Tyramide Kit, HRP Streptavidin			
Appearance	Liquid			
Odor	No information available			
Odor Threshold	No information available			
РН	No information available			
Melting point/freezing point	No information available			
Boiling point	No information available			
Flash point	No information available			
Evaporation rate	No information available			
Flammability	No information available			
Explosive limits	No information available			
Vapor Pressure	No information available			
Relative density	No information available			
Solubility	No information available			
Partition coefficient: n-octanol/water	No information available			
Auto-ignition temperature	No information available			
Decomposition temperature	No information available			
Viscosity	No information available			
Explosive properties	No information available			
Other information	No information available			

## **SECTION 10: Stability and reactivity**

Reactivity None known.

Chemical stability Stable under recommended storage conditions.

Possibility of hazardou reactions No information available.

**Conditions to avoid** Heat, flames and sparks.

Materials to avoid No information available.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

## **SECTION 11: Toxicological information**

Acute toxicity DMSO

**Oral LD50** rat - 14,500 mg/kg

**Inhalation LC50** Inhalation - rat - 4 h - 40250 ppm

 $\textbf{Dermal LD50} \hspace{35mm} \text{rabbit -> 5,000 mg/kg}$ 

Other information on acute toxicity No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitization No data available

Germ cell mutagenicity Salmonella typhimurium assay (Ames test): negative (+/- activation), DMSO is used as a

neutral solvent in the Ames mutagen test

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard No data available

Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin May** be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

**Additional Information** 

RTECS: PV6210000 (DMSO)

## **SECTION 12: Ecological information**

**Toxicity** The LC50(96hrs) for ten species of fish range from 32500 to 43000ppm

Persistence and degradability No information available

**Biodegradation** Dimethyl sulfoxide: biodegradation: 90% (28d).

Mobility in soil No information available

Results of PBT and vPvB assessment No information available

Other adverse effects No information available

**Additional information** No information available

## **SECTION 13: Disposal considerations**

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

### **SECTION 14: Transport information**

## IATA / ADR / DOT-US / IMDG

Not dangerous goods during transportation

UN number Not Applicable

UN proper shipping name Not Applicable

Transport hazard class(es) Not Applicable

Packing group Not Applicable

Environmental hazards Not Applicable

**Special precautions for user** Not Applicable

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code  $\,$ 

Not Applicable.

## **SECTION 15: Regulatory information**

### **US Federal Regulations**

US Toxic Substances Control Act (TSCA) Not listed

SARA 302 No chemicals were found.

SARA 313 No chemicals were found.

SARA 311/312 Hazards DMSO: fire hazard, chronic health hazard

Acute Health Hazard Yes

Chronic Health Hazard No

Fire Hazard Yes

Sudden Release of Pressure Hazard No

Reactive Hazard No

WHMIS Hazard Class Flammable liquids, category 4

### **SECTION 16: Other information**

Reason for revision SDS sections updated

Version no. 1

For research use only. Not for use in diagnostic procedures.

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