

Doc No: 931-DF720-20X Rev: A Date of Release: 10-Oct-2022

## 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

a)	GHS product identifier:	eFISH Assay Kit
b)	Other means of identification:	Not available
c)	Product code:	DF720-20X
d)	Recommended use of the chemical and restrictions on use:	Restricted for professional users
e)	Supplier's details (including name, address, phone number etc.):	Omicsveu 48810 Kato Road, Suite 100E & 200E Fremont, CA 94538
f)	Emergency phone number:	Omicsveu: (01) (510) 275-055 Chemtrec Assistance: (800) 424-9300 (U.S. and Canada only) (01)(703) 527-3887 (all other countries)

## 2. HAZARD IDENTIFICATION

a) GHS classification of the substance/mixture and any national or regional information:

PART NO.	CHEMICAL NAME	SYNONYMS	CAS NO.	PERCENT	EINECS#
HX032	Tris base	2-Amino-2-(hydroxymethyl)-1,3-propanediol, THAM, Trometamol	77-86-1	<50	201-064-4
	Triton X-100	<i>t</i> -Octylphenoxy polyethoxyethanol, Polyethylene glycol, <i>tert</i> -octylphenyl ether	9036-19-5	<10	Not listed
	Glycerol	1,2,3-propanetriol, glycerin, glycol alcohol	56-81-5	<10	200-289-5
HX604	Sodium citrate	2-Hydroxy-1,2,3-propanetricarboxylic acid trisodium salt	68-04-2	<10	200-675-3
	Sodium Chloride	Common salt, halite, rock salt, saline, sea salt, table salt	7647-14-5	<20	231-598-3
	Proclin 300 (Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one [3:1])	Bio-perge	55965-84-9	0.1	911-418-6
	NP40	alpha-(para-Nonphenyl)-omega-hydroxypoly-(oxyethylene)	9016-45-9	1	Not listed
HX972	Sodium citrate	2-Hydroxy-1,2,3-propanetricarboxylic acid trisodium salt	68-04-2	<10	200-675-3
	Sodium Chloride	Common salt, halite, rock salt, saline, sea salt, table salt	7647-14-5	<20	231-598-3
	Glycerol	1,2,3-propanetriol, glycerin, glycol alcohol	56-81-5	<10	200-289-5
	Proclin 300 (Mixture of 5-Chloro-2-methyl-4-isothiazolin-3-one and 2-Methyl-2H -isothiazol-3-one [3:1])	Bio-perge	55965-84-9	0.1	911-418-6
	Proclin 950	2-Methyl-3(2H)-isothiazolone, 2-Methyl-4-isothiazoline-3-one	2682-20-4	<0.15	220-239-6
HX632	Pepsin	Pepsin fortiori, pepsin A, lactated pepsin	9001-75-6	100	232-629-3
HK606	DAPI	2-(4-Amidinophenyl)-6-indolecarbamidine dihydrochloride 4', 6-Diamidino-2-phenylindole dihydrochloride, DAPI dihydrochloride	28718-90-3	≤100	249-186-7
HK996	Ribonucleoside vanadyl complexes	RVC, vanadyl ribonucleoside complexes, VRC	123334-20-3	≥ 2.5 - < 10 %	248-652-7

b) GHS label elements, including precautionary statements:

**HX032, HX604, HK606**

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Pictogram: None

Signal word: None

Hazard statements: No known significant effects or critical hazards.

Prevention: N/A

Precautionary statements: N/A

Response: N/A

Storage: N/A

Disposal: N/A

Hazardous ingredients: No hazardous ingredient

**HX632**

Pictogram:



Signal word: Danger

**HX972**

Pictogram:



Signal word: Danger

Contains: Proclin 300, Proclin 950

**HK996**

Pictogram: none

Signal word: none

**Hazard statement(s):**

H412: Harmful to aquatic life with long lasting effects.

**Precautionary statement(s):**

P273: Avoid release to the environment.

P501: Dispose of contents/ container to an approved waste disposal plant.

**Supplemental Hazard Statement(s):** none

c) Other hazards which do not result in the classification or are not covered by the GHS: Restricted to professional users.

### **3. EXPOSURE LIMITS**

CAS No.	OSHA PEL	ACGIH TLV	NIOSH	OTHER
77-86-1	NDA	NDA	NDA	NDA
9036-19-5	NDA	NDA	NDA	NDA
56-81-5	TWA 15 mg/m <sup>3</sup> (total); TWA 5 mg/m <sup>3</sup> (resp)	NDA	NDA	NDA
68-04-2	NDA	NDA	NDA	NDA
7647-14-5	NDA	NDA	NDA	NDA
55965-84-9	NDA	NDA	NDA	NDA
9016-45-9	NDA	NDA	NDA	NDA
2682-20-4	NDA	NDA	NDA	NDA
9001-75-6	NDA	NDA	NDA	NDA
28718-90-3	NDA	NDA	NDA	NDA
123334-20-3	NDA	NDA	NDA	NDA

### **4. COMPOSITION/INFORMATION ON INGREDIENTS**

#### **Substance**

- a) Chemical identity: Compound and mixtures
- b) Common name, synonyms, etc.: NDA
- c) CAS number and other unique identifiers

Part No.	Description of Component	Formula
HX032	EZ-AR2	Mixture
HX604	eFISH Wash Buffer 1	Mixture
HX972	eFISH Reagent A	Mixture
HX632	Pepsin	Mixture
HK606	DAPI	Compound
HK996	Ribonucleoside vanyl complexes	Mixture

### **5. FIRST AID MEASURES**

**HX032, HX604, HX972, HX632, HK606, HK996**

**EYES:** Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses. DO NOT allow victim to rub or keep eyes closed.

**SKIN:** Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**INGESTION:** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

**INHALATION:** Move the victim to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician:** Treat symptomatically and supportively. No specific antidote exists.

## **6. FIRE-FIGHTING MEASURES**

- a) Suitable (and unsuitable) extinguishing media:  
Use extinguishing media appropriate for the surrounding fire: dry chemical, foam, carbon dioxide, or water. Water spray may be used to cool fire and/or protect response personnel.
- b) Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products):  
The product itself does not burn. Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products.
- c) Special protective equipment and precautions for fire-fighters:  
Firefighters should wear proper protective equipment and self-contained breathing apparatus (SCBA) if necessary.

## **7. ACCIDENTAL RELEASE MEASURES**

### **HX032, HX604, HX972, HX632, HK606, HK996**

- a) Personal precautions, protective equipment and emergency procedures:  
Personal protective equipment and clothing is recommended during all cleanup procedures. Eliminate all ignition sources, stop or control leak. Refer to Section 9 for additional information on exposure controls and personal protective equipment.
- b) Environmental precautions:  
Do not allow into any body of water. Check with local and State regulations before discharging into sewers or public landfills.
- c) Methods and materials for containment and cleaning up.  
Avoid physical contact during removal. An approved respirator is recommended when irritant or nuisance vapors are produced. Flood the area with water immediately. Control spill with wetted paper towels and isolate material. Place in a closed container and hold for waste disposal. Make sure towels or absorbent materials remain wet while waiting for chemical waste pick-up. Ventilate area and wash spill site after material pickup is complete. Refer to Section 14 for complete disposal information.

## **8. HANDLING AND STORAGE**

### **HX032, HX604, HX972, HX632, HK606, HK996**

- a) Precautions for safe handling:  
Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Avoid contact with skin, eyes, and clothing.
- b) Conditions for safe storage, including any incompatibilities:  
Keep the kit in a tightly closed in a ventilated area. The recommended storage temperature is 2–8 °C. However, ribonucleoside vanadyl complexes (HK966) should be stored in -20 °C immediately upon receiving the kit.

Storage Class: Non-combustible liquids.

## **9. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **HX032, HX604, HX972, HX632, HK606, HK996**

#### **Engineering Controls:**

Provide adequate general and local exhaust ventilation. Ensure compliance with applicable exposure limits.

**Personal Protective Equipment****Eyes:** Wear safety goggles.**Skin:** Wear appropriate protective gloves to prevent skin exposure.**Clothing:** Wear appropriate protective clothing to prevent skin exposure.**Respirators:** None required where adequate ventilation conditions exist.**10. PHYSICAL AND CHEMICAL PROPERTIES****HX032, HX604, HX972, HK606**

BOILING POINT: NDA

VAPOR PRESSURE (MM HG): NDA

VAPOR DENSITY (AIR=1): NDA

MELTING POINT: NDA

SPECIFIC GRAVITY : NDA

SOLUBILITY (H<sub>2</sub>O): NDA

APPEARANCE AND ODOR: Clear liquid, Odorless

**HX632**

BOILING POINT : NDA

VAPOR PRESSURE (MM HG): NDA

VAPOR DENSITY (AIR=1): NDA

MELTING POINT : NDA

SPECIFIC GRAVITY : NDA

SOLUBILITY (H<sub>2</sub>O) : NDA

APPEARANCE &amp; ODOR : Yellow, Solid

**HK996**

BOILING POINT: NDA

VAPOR PRESSURE (MM HG): NDA

VAPOR DENSITY (AIR=1): NDA

MELTING POINT: NDA

SPECIFIC GRAVITY : NDA

SOLUBILITY (H<sub>2</sub>O): NDA

APPEARANCE AND ODOR: Green aqueous solution, NDA

**11. STABILITY AND REACTIVITY****HX032**

STABILITY: Stable under recommended conditions.

CONDITIONS TO AVOID: NDA.

HAZARDOUS POLYMERISATION: Hazardous polymerization does not occur.

MATERIALS TO AVOID: NDA.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of phosphorus, hydrogen chloride gas, sodium oxides.

**HX604, HX972**

STABILITY: NDA.

CONDITIONS TO AVOID: NDA

DECOMPOSITION: NDA

HAZARDOUS POLYMERIZATION: NDA

**HX632**

STABILITY: Stable under recommended conditions.

CONDITIONS TO AVOID: Avoid dust formation and incompatible products

HAZARDOUS POLYMERISATION: Hazardous polymerization does not occur.

MATERIALS TO AVOID: Strong oxidizing agents, alcohols, powdered metal salts.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

**HK606**

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: NDA

HAZARDOUS POLYMERISATION: None

HAZARDOUS DECOMPOSITION PRODUCTS: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

HAZARDOUS COMBUSITION PRODUCTS: Carbon oxides, nitrogen oxides (NO<sub>x</sub>), hydrogen chloride gas.

**HK996**

STABILITY: Stable under recommended conditions.

CONDITIONS TO AVOID: Avoid dust formation and incompatible products

HAZARDOUS POLYMERISATION: Hazardous polymerization does not occur.

MATERIALS TO AVOID: Strong oxidizing agents, alcohols, powdered metal salts.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), sulfur oxides, vanadium oxides.

**12. TOXICOLOGICAL INFORMATION**

- a) Information on the likely routes of exposure: Eyes, Oral, Dermal, Inhalation.
- b) Symptoms related to the physical, chemical, and toxicological characteristics:

**HX032**

INHALATION: No known significant effects or critical hazards.

INGESTION: No known significant effects or critical hazards.

SKIN CONTACT: No known significant effects or critical hazards.

EYE CONTACT: No known significant effects or critical hazards.

**HX604**

EYE CONTACT: May cause irritation

SKIN CONTACT: May be harmful and might cause irritation

INGESTION: Maybe harmful if ingested

INHALATION: May cause irritation of the respiratory

CHRONIC: NDA

**HX632**

INHALATION: Possible inflammation of the respiratory tract

INGESTION: Irritant

SKIN CONTACT: Irritant

EYE CONTACT: Irritant

TARGET ORGANS: NDA

**HX972**

EYE CONTACT: May cause irritation

SKIN CONTACT: May be harmful and might cause irritation.

INGESTION: Maybe harmful if ingested.

INHALATION: May cause irritation of the respiratory.

CHRONIC: NDA

**HK606**

INHALATION: May cause respiratory tract irritation.

INGESTION: May cause nausea, vomiting, headaches, dizziness, and gastrointestinal irritation.

SKIN CONTACT: May cause skin irritation. May be fatal if absorbed through skin.

EYE CONTACT: May cause eye irritation

TARGET ORGANS: NDA

**HK996**

INHALATION: NDA

INGESTION: Irritant

SKIN CONTACT: Irritant

EYE CONTACT: Irritant

TARGET ORGANS: NDA

ADDITIONAL INFORMATION:

**Endocrine disrupting properties****Product:**

Assessment: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Hazardous properties cannot be excluded but are unlikely when the product is handled appropriately.

**Components****Vanadium oxide sulfate hydrate****Acute toxicity**

Acute toxicity estimate Oral - Expert judgment - 100, 1 mg/kg (Expert judgment)

Remarks: (in analogy to similar products)

The value is given in analogy to the following substances: Vanadium (IV) oxide sulfate

c) Delayed and immediate effects and also chronic effects from short and long term exposure: NDA.

d) Numerical measures of toxicity (such as acute toxicity estimates).

## TOXICITY DATA

CAS#	RTECS	LD <sub>50</sub>	CARCINOGENICITY					
			ACGIH	IARC	NIOSH	NTP	OSHA	OTHER
77-86-1	NDA	Oral - Mouse - male and female - 5.400 mg/kg	NDA	NDA	NDA	NDA	NDA	NDA
9036-19-5	NDA	Oral - Rat - 1.900 - 5.000 mg/kg Dermal - Rabbit - > 3.000 mg/kg	NDA	NDA	NDA	NDA	NDA	NDA
56-81-5	NDA	Oral - Rat - 27.200 mg/kg Dermal - Rabbit - > 10.000 mg/kg	NDA	NDA	NDA	NDA	NDA	NDA
68-04-2	NDA	Oral - Mouse - male and female - 5.400 mg/kg Dermal - Rat - male and female - > 2.000 mg/kg	NDA	NDA	NDA	NDA	NDA	NDA
7647-14-5	VZ4725000	Oral - Mouse = 4 gm/kg Oral - Rat = 3 gm/kg	No	No	No	No	No	No
7758-11-4	Not listed	NDA	No	No	No	No	No	No
26172-55-4	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
9002-92-0	JR5960000 JR5970000 JR5990000 MC9610000 MC9611000 MD0875000	Oral - Mouse = 4.94 gm/kg Oral - Rat = 8.6 gm/kg	NDA	NDA	NDA	NDA	NDA	NDA
2682-20-4	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
9016-45-9	AX0247000	Oral - Rat - Acute - 4000 mg/kg	NDA	NDA	NDA	NDA	NDA	NDA
9001-75-6	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
28718-90-3	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
123334-20-3	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA

## 13. ECOLOGICAL INFORMATION

### **HX032, HX604, HX972, HX632, HK606, HK996**

- a) Ecotoxicity (aquatic and terrestrial, where available) : NDA
- b) Persistence and degradability : NDA
- c) Bioaccumulative potential : NDA
- d) Mobility in the soil : NDA
- e) Other adverse effects : NDA

## 14. DISPOSAL INFORMATION

Dispose in accordance with all applicable federal, state, and local environmental regulations.

## 15. TRANSPORT INFORMATION

US DOT: Non-Regulated

IMO: No information available.

IATA: No information available.

RID/ADR: No information available.

Canadian TDG: No information available.

## 16. REGULATORY INFORMATION

### **HX032**

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

Complies with the requirements of Regulation (EC) No. 1907/2006.



**Chemical safety assessment:** Chemical safety assessment not carried out

**HX632**

Risk phrases

R36/37/38: Irritating to eyes, respiratory system, and skin.

R42: May cause sensitization by inhalation.

Safety Phrases :

S2: Keep out of the reach of children.

S24: Avoid contact with skin.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37: Wear suitable protective clothing and gloves.

**HK606**

SARA 304 RQ: Not applicable.

SARA 311/312 Classification: Not applicable.

**International lists**

Australia: Not determined

Canada: Not determined

China: All components are listed or exempted.

Japan: Not determined

Republic of Korea: Not determined

Malaysia: Not determined.

New Zealand: All components are listed or exempted.

Philippines: Not determined.

Taiwan: Not determined

**HK996****H-Statements**

H301 Toxic if swallowed.

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

**17. Other information including information on preparation and revision of the SDS****Key abbreviations:**

NDA: No data available

## Notice to reader

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