

Doc No: 931-DF500E Rev: B Date of Release: 22-Sep-2020

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

- a) GHS Product Identifier : eFISH Histo Kit
- b) Other means of identification : Not available
- c) Product code : DF500-20XE
- d) Recommended use of the chemical and restrictions on use : Restricted for professional users.
- e) Supplier's details (including name, address, phone number etc.) : BioGenex Laboratories, Inc
48810 Kato Road, Suite 100E & 200E
Fremont, CA 94538
- f) Emergency phone number : BioGenex: (01) (510) 275-0550
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#		
HK983	Sodium Thiocyanate	Sodium rhodanide,	540-72-7	<10	208-754-4		
		Sodium sulfocyanate					
		Sodium rhodanate,					
HK632	Pepsin	Glycerol	56-81-5	30	200-289-5		
		1,2,3-propanetriol; Glycerin, glycol alcohol					
HK604	Sodium Citrate	Pepsin fortiori,	9001-75-6	100	232-629-3		
		Pepsin A, lactated Pepsin					
HK604	Sodium Chloride	2-Hydroxy-	68-04-2	<10	200-675-3		
		1,2,3-Propanetricarboxylic Acid Trisodium Salt					
		Common salt				7647-14-5	<20
NP40Alpha-	(para-NonphenylO-omega Hydroxynona-(oxyethylene)	Halite; Rock salt; Saline; Salt; Sea salt; Table salt	26172-55-4	0.1	247-500-7		
		Bio-perge				2682-20-4	220-239-6
		9016-45-9				1	Not listed

b) GHS label elements, including precautionary statements :

HK983

LABELLING :



SIGNAL WORD: DANGER

CONTAINS: Sodium thiocyanate

HK632

LABELLING:



SIGNAL WORD: DANGER

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

EXPOSURE LIMITS

CAS No.	OSHA PEL	ACGIH TLV	NIOSH	OTHER
540-72-7	TWA: 5 mg/m ³	NDA	IDLH: 25 mg/m ³	NDA
56-81-5	TWA 15 mg/m ³ (total) TWA 5 mg/m ³ (resp)	NDA	NDA	NDA
7647-01-0	5 ppm (7 mg/m ³)	2 ppm	5 ppm (7 mg/m ³)	NDA
9001-75-6	NDA	NDA	NDA	NDA
68-04-2	NDA	NDA	NDA	NDA
7647-14-5	NDA	NDA	NDA	NDA
26172-55-4	NDA	NDA	NDA	NDA
2682-20-4	NDA	NDA	NDA	NDA
9016-45-9	NDA	NDA	NDA	NDA

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

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

Part No.	Description of Component	Formula
HK983	eFISH Pretreatment Solution (2X)	Mixture
HK632	Pepsin	Mixture
HK604	eFISH Wash buffer 1	Mixture

4. FIRST AID MEASURES

HK983, ,HK604, HK632

EYES: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. 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.

5. 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.

6. ACCIDENTAL RELEASE MEASURES

HK983, HK604, HK632

- 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 8 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 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 13 for complete disposal information.

7. HANDLING AND STORAGE

HK983, HK604, HK632

- 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 container in a tightly closed in a ventilated area. The recommended storage temperature is 2-8°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

HK983, HK604, HK602

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. .

9. PHYSICAL AND CHEMICAL PROPERTIES

HK983, HK604

BOILING POINT	: NDA	VAPOR PRESSURE (MM HG):	NDA
VAPOR DENSITY (AIR=1)	: NDA	MELTING POINT	: NDA
SPECIFIC GRAVITY	: NDA	SOLUBILITY (H2O)	: NDA
APPEARANCE & ODOR	: Liquid, NDA		

HK632

BOILING POINT	: NDA	VAPOR PRESSURE (MM HG):	NDA
VAPOR DENSITY (AIR=1)	: NDA	MELTING POINT:	NDA
SPECIFIC GRAVITY	: NDA	SOLUBILITY (H2O):	NDA
APPEARANCE & ODOR	: Yellow, Solid		

10. STABILITY AND REACTIVITY

HK983

STABILITY : Stable under recommended conditions.

CONDITIONS TO AVOID : Reacts with water, steam or acids to produce toxic vapors..

HAZARDOUS POLYMERISATION : Hazardous polymerization does not occur.

MATERIALS TO AVOID : Acids. Strong oxidizing agents. Strong bases

HAZARDOUS DECOMPOSITION PRODUCTS : Carbon oxides. Sulfur oxides. Sodium oxides..

HK604

STABILITY: NDA.

CONDITIONS TO AVOID: NDA

DECOMPOSITION: NDA

HAZARDOUS POLYMERIZATION: NDA

HK632

STABILITY : Stable under recommended conditions.

CONDITIONS TO AVOID : Avoid dust formation. 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 (CO₂)

11. TOXICOLOGICAL INFORMATION

a) Information on the likely routes of exposure: Eyes, Oral, Dermal, Inhalation

b) Symptoms related to the physical, chemical and toxicological characteristics:

HK983

INHALATION: Harmful

INGESTION: Harmful

SKIN CONTACT: Harmful

EYE CONTACT: Irritation

TARGET ORGANS: Skin, Eyes, Gastrointestinal tract

HK604

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

HK632

INHALATION: Possible inflammation of the respiratory tract.

INGESTION: Irritant

SKIN CONTACT: Irritant

EYE CONTACT: Irritant

TARGET ORGANS: NDA

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	LD50	CARCINOGENICITY					
			ACGIH	IARC	NIOSH	NTP	OSHA	OTHER
540-72-7	XL2275000	oral-rat LD50 764 mg/kg	NDA	NDA	25 mg/m ³	NDA	5 mg/m ³	NDA
56-81-5	MA805000	NDA	NDA	NDA	NDA	NDA	15 mg/m ³	NDA
							(Total)	
7647-01-0	MW4025000	Mouse ip 1449 mg/kg	2ppm	NDA	5 ppm	NDA	5 ppm	NDA
							(7 mg/m3)	(7 mg/m3)
68-04-2	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
7647-14-5	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
26172-55-4	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
2682-20-4	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
9016-45-9	AX0247000	ORAL (LD50): Acute: 4000 mg/kg [Rat].						
9001-75-6	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA

12. ECOLOGICAL INFORMATION

HK983, HK604, HK632

- 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

13. DISPOSAL INFORMATION

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

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

14. TRANSPORT INFORMATION

US DOT: Non-Regulated

IMO: No information available.

IATA: No information available.

RID/ADR: No information available.

Canadian TDG: No information available.

15. REGULATORY INFORMATION

HK983

RISK PHRASES

R22- Harmful if swallowed.

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

SAFETY PHRASES

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

S37- Wear suitable gloves.

S46- If swallowed, seek medical advice immediately and show this container or label.

HK632

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.

S22 : Do not breathe dust.

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.

16. Other information including information on preparation and revision of the SDS

Key abbreviations:

N/A : Not Applicable
NDA : No data available

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