

Doc #: 931-DF400-50K
 Release Date: 16th Aug 2017
 Revision: B

1. CHEMICAL IDENTIFICATION/COMPANY

Product Name: Super Sensitive One-Step Polymer-HRP ISH Detection System Catalog No.: DF400-50K

Manufacturer: BioGenex Laboratories, Inc.
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2. COMPOSITION/INFORMATION ON INGREDIENTS

Part No.	Description of Component	Formula
HK632-05K	Liquid Pepsin Mixture	HK601-03K NAR Solution
HK839-12K	Wash Solution A	Mixture
HK880-12K	Wash Solution B	Mixture
HK946-12K	Wash Solution Stock	Mixture
HK947-12K	Wash Solution Stock	Mixture
HK026-03K	Peroxide Block	Mixture
HK083-03K	Power Block	Mixture
HK818-03K	Antifluorescen	Mixture
HK943-03K	One Step Polymer Solution	Mixture
HK124-5K	Liquid DAB chromogen	Mixture
HK520-03K	Stable DAB Buffer	Mixture
HK030-03K	Hematoxylin	Mixture

3. HAZARDS IDENTIFICATION

Part No.	Chemical Name	Synonyms	CAS No.	Percent	Einecs#
HK632-05K	Liquid Pepsin	Pepsin	9001-75-6	<1%	232-629-3
HK026-03K	Hydrogen Peroxide	-	7722-84-1	30%	231-765-0
HK083-5K	Gentamicin	Geramycin, Gentiomycin	1405-41-0	<1%	215-778-9
	Neomycin		1404-04-2	<1%	215-766-3
	Sodium Azide	Sodium salt of hydrazoic acid Smite; Azium.	26628-22-8	<1%	247-852-1
HK943-03K	Sodium Azide	Sodium salt of hydrazoic acid Smite; Azium.	26628-22-8	<1%	247-852-1
HK124-5K	3, 3'-Diaminobenzodine tetrahydrochloride	DAB	7411-49-6		231-018-9
HK520-03K	Proprietary ingredient A**	---	-	<50	-
	Proprietary ingredient B**	---		>50	
HX030-50D	Acetic Acid.. %	Acetic acid (aqueous), Ethanoic acid, Glacial acetic acid (pure compound), Methanecarboxylic acid	64-19-7	10-30%	200-580-7
	Hematoxylin	Gill 2 Method Hematoxylin Stain; Gill Hematoxylin Solution II	517-28-2	1-5%	208-237-3

** For the proprietary ingredient, specific chemical identity is being withheld as a trade secret.

EXPOSURE LIMITS

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CAS No.	OSHA PEL	ACGIH TLV	NIOSH	OTHER
39450-01-6	NDA	NDA	NDA	NDA
7722-84-1	NDA	NDA	NDA	NDA
1405-41-0	NDA	NDA	NDA	NDA
1404-04-2	NDA	NDA	NDA	NDA
7411-49-6	NDA	NDA	NDA	None
64-19-7	10 ppm TWA; 25 mg/m ³	10 ppm TWA;	10 ppm TWA; 25 mg/m ³ TWA 50 ppm IDLH	NDA
517-28-2	NDA	NDA	NDA	NDA
26628-22-8	NDA	0.29 mg/m ³ Ceiling (as NaN ₃) 0.11 ppm Ceiling	NDA	NDA

4. FIRST AID MEASURES

Persons with known allergy to antibiotics should take necessary precautions while handling this product.

HK632-05K, HK026-03K, HK083-5K, HK943-03K, HK124-5K, HK520-03K, HX030-50D

- EYES: Flush eyes with plenty of water and do not allow the victim to rub or keep eyes closed.
- SKIN: Wash with soap and copious amounts of water. Consult a physician immediately.
- INGESTION: Rinse mouth with water. If unconscious, do not give anything to the person. Consult a physician immediately.
- INHALATION: Remove the person to a ventilated area. If the victim is not breathing, provide artificial respiration.

5. FIRE-FIGHTING MEASURES

HK632-05K, HK026-03K, HK083-5K, HK943-03K, HK124-5K, HK520-03K, HX030-50D

- FLASH POINT: No Data available
- FIRE AND EXPLOSION HAZARD: No Data available.
- FIREFIGHTING MEDIA: Use water, Alcohol resistant foam, carbon dioxide or dry chemical
- FIREFIGHTING MEASURES: Firefighters should wear proper protective equipment and self-contained breathing apparatus (SCBA) if necessary.
- FLAMMABLE LIMITS: No Data available

6. ACCIDENTAL RELEASE MEASURES

HK632-05K, HK026-03K, HK083-5K, HK943-03K, HK124-5K, HK520-03K, HX030-50D

Wear self-contained breathing apparatus (SCBA) and full protective clothing. It is advised to avoid dust formation. Do not let the spilled material enter drains.

7. HANDLING AND STORAGE

HK632-05K, HK026-03K, HK083-5K, HK943-03K, HK124-5K, HK520-03K, HX030-50D

- USAGE PRECAUTIONS: Avoid spilling, skin and eye contact. Avoid eating, drinking and smoking when using the product.
- STORAGE PRECAUTIONS: Keep container in a tightly closed in a ventilated area. The recommended storage temperature is 2-8°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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VENTILATION: Provide local exhaust or process enclosure ventilation system to meet all federal, state, and local requirements.

RESPIRATOR: None required where adequate ventilation conditions exist.

EYE/SKIN PROTECTION: Wear safety goggles and appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged eye/skin contact with this substance.

ENGINEERING MEASURES: Provide adequate general and local exhaust ventilation.

RESPIRATORY EQUIPMENT: If ventilation is insufficient, suitable respiratory protection must be provided.

HAND PROTECTION: Use protective gloves.

EYE PROTECTION: Wear approved safety goggles.

HYGIENE MEASURES: Wash at the end of each work shift and before eating, smoking and using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES

HK632-05K, HK026-03K, HK083-5K, HK943-03K, HK124-5K, HK520-03K, HX030-50D

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

10. STABILITY AND REACTIVITY

HK632-05K, HK026-03K, HK083-5K, HK943-03K, HK124-5K, HK520-03K, HX030-50D

STABILITY: Stable when stored at recommended conditions.

CONDITIONS TO AVOID: Incompatible materials like strong oxidizing agents, light, dust generation, excess heat.

DECOMPOSITION: Nitrogen oxides, carbon monoxide, carbon dioxide, sulfur oxides (SOx), including sulfur oxide and sulfur dioxide, hydrazoic acid.

HAZARDOUS POLYMERIZATION: NDA

11. TOXICOLOGICAL INFORMATION

HK632-05K, HK026-03K, HK083-5K, HK943-03K, HK124-5K, HK520-03K, HX030-50D

EYE CONTACT: May cause irritation.

SKIN CONTACT: May be harmful if absorbed through skin and might result in sensitization

INGESTION: May cause gastro intestinal irritation. Reports of hearing loss, neuromuscular paralysis are known. Might cause photosensitivity.

INHALATION: May cause respiratory tract irritation with

CHRONIC: In case of maternal toxicity, fetal effects have been reported in animal studies. Chronic exposure may cause kidney damage, reproductive effects. As Neomycin is an aminoglycoside, which are known to induce nephrotoxicity (toxic to kidney cells) and ototoxicity (having a toxic effect on the structures of the ear, especially the nerve supply).

Toxicity data

CAS#	RTECS	LD50	CARCINOGENICITY						
			ACGIH	IARC	NIOSH	NTP	OSHA	Other	
39450-01-6	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
7722-84-1	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA	NDA
1405-10-3	NDA>8 gm(base)/kg	NDA	NDANDANDANDANDA						
1405-41-0	NDA	NDA		NDA	NDA	NDA	NDANDANDANDA		
7411-49-6	DV8753000	IPR-MUS: 63 mg/kg	NCIBR [*] NCI-E-68-1311,73	NDA	NDA	NDA	NDA	NDA	NDA
64-19-7	NDA	NDA		NDA	NDA	NDA	NDA	NDA	NDA
517-28-2	NDA	NDA		NDA	NDA	NDA	NDA	NDA	NDA
26628-22-8VY8050000	10mg/kg	0.29 mg/m ³ NDA	0.29 mg/m ³	NDA					

12. ECOLOGICAL INFORMATION

HK632-05K, HK026-03K, HK083-5K, HK943-03K, HK124-5K, HK520-03K, HX030-50D

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Ecotoxicity: NDA.
Environmental Fate: NDA.
Physical/Chemical: NDA.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

US DOT: No information available
IMO: No information available.
IATA: No information available.
RID/ADR: No information available.
Canadian TDG: No information available.

15. REGULATORY INFORMATION

HK632-05K, HK083-5K, HK943-03K

LABELING:



SIGNAL WORD: DANGER

Contains: SODIUM AZIDE

Risk Phrases:

R28 : Very toxic if swallowed.
R32 : Contact with acids liberates very toxic gas.
R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases :

S1/2 : Keep locked up and out of the reach of children.
S28 : After contact with skin, wash immediately with plenty of . . . (to be specified by the manufacturer).
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S60 : This material and its container must be disposed of as hazardous waste.
S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.

HK026-03K

LABELING:

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SIGNAL WORD: WARNING

Contains : HYDROGEN PEROXIDE

Risk Phrases:

R5 : Heating may cause an explosion.
R8 : Contact with combustible material may cause fire.
R20/22 : Harmful by inhalation and if swallowed.
R35 : Causes severe burns.

Safety Phrases :

S1/2 : Keep locked up and out of the reach of children.
S17 : Keep away from combustible material.
S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 : After contact with skin, wash immediately with plenty of . . . (to be specified by the manufacturer).
S36/37/39 : Wear suitable protective clothing, gloves and eye/face protection.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

HK124-5K
LABELING :



SIGNAL WORD: WARNING

Contains: DAB

Risk Phrases:

R 36/37/38 Irritating to eyes, respiratory system and skin

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

HX030-50D

LABELING



SIGNAL WORD: WARNING

Contains : ACETIC ACID

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Risk Phrases

R10 : Flammable.
R35 : Causes severe burns.

Safety Phrases :

S1/2 : Keep locked up and out of the reach of children.
S23 : Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).
S26 : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45 : In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

16. MISCELLANEOUS INFORMATION

No additional information available.

N/A: Not Applicable NDA: No Data Available

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