

Doc No: 931-HK080 Rev: A Date of Release: 23-Aug-2016

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

- a) GHS Product Identifier : Antigen Retrieval Citra Solution
- b) Other means of identification: Not available
- c) Product code : HK080-5K, HK080-5KE, HK080-9K, HK081-20K, HK081-20KE, HK081-5K, HK081-5KE
- 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
49026 Millmont Drive
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:
No hazardous ingredient
- b) GHS label elements, including precautionary statements :
LABELING : Not applicable.
SIGNAL WORD : Non Hazardous
- c) Other hazards which do not result in the classification or are not covered by the GHS: Restricted to professional users.
None Known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

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

Chemical Name	Synonyms	CAS No.	Percent	Einecs#
Citric acid anhydrous	2-Hydroxy-1,2,3-tricarboxylic acid	77-92-9	<10	201-069-1

4. FIRST AID MEASURES

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

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.

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.
- b) Specific hazards arising from the chemical (e.g. nature of any hazardous combustion products):
No specific data. The product itself does not burn.
- 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

- 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:
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air)..
- c) Methods and materials for containment and cleaning up.
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7. HANDLING AND STORAGE

- 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. Eliminate all sources of ignition. Avoid eating, drinking and smoking when using the product.
- b) Conditions for safe storage, including any incompatibilities:
Keep container in a tightly closed in a ventilated area. The recommended storage temperature is 2-8oC. Keep away from heat, sparks and open flame. Keep separate from food, feedstuffs, fertilizers and other sensitive material. Do not store in direct sunlight.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

BOILING POINT	: 1000C	VAPOR PRESSURE (MM HG):	NDA
VAPOR DENSITY (AIR=1)	: NDA	MELTING POINT ? Freezing Point:	0 ^o C
SPECIFIC GRAVITY	: NDA	SOLUBILITY (H2O)	: Soluble
pH	: 6	APPEARANCE & ODOR	: Clear liquid, Odorless

10. STABILITY AND REACTIVITY

STABILITY: The product is stable.

CONDITIONS TO AVOID: No specific data.

Incompatible with: May react or be incompatible with oxidising materials.

HAZARDOUS POLYMERISATION: No specific data.

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

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:

INHALATION: May cause respiratory tract irritation.

EYE CONTACT: May cause severe eye irritation and possible eye burns.

SKIN CONTACT: May cause skin irritation.

INGESTION: May cause gastrointestinal irritation with nausea, vomiting, and diarrhea.

CHRONIC: Repeated exposure may cause erosion of teeth.

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)

CAS#	RTECS	LD50	CARCINOGENICITY				
			ACGIH	IARC	NIOSH	NTP	OSHA
77-92-9	GE7350000	Oral mouse = 5.04 gm/kg Oral rat = 3 gm/kg	No	No	No	No	No

12. ECOLOGICAL INFORMATION

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.

Disposal: Generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer.

Hazardous waste: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC

Special precautions: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

US DOT: Not regulated..

IMO: No information available.

IATA: Not regulated..

RID/ADR: Not regulated..

Canadian TDG: No information available.

15. REGULATORY INFORMATION

No information available.

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

Key abbreviations:

N/A	: Not Applicable
NDA	: No data available

Notice to reader

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