

SAFETY DATA SHEET



DCA Systems Hemoglobin A1c Reagent Kit

SDS # :

5035C

Section 1. Identification

Product identifier : DCA Systems Hemoglobin A1c Reagent Kit
Product code : 5035C, 10311134, 06162000, 10888639
Product type : Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Not applicable.

Manufactured/supplied : Siemens Healthcare Diagnostics Inc.
511 Benedict Avenue
Tarrytown, NY 10591-5097 USA
1-877-229-3711

Emergency telephone number (800) 424-9300 (CHEMTREC) (24/365)

Section 2. Hazards identification

OSHA/HCS status : HbA1c Oxidant

HbA1c Buffer Solution

HbA1c Antibody Latex

HbA1c Agglutinator

Glass capillary

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Section 2. Hazards identification

Classification of the substance or mixture : Not classified.

Additional information : Not available.
Not available.

GHS label elements

Signal word : **HbA1c Oxidant** No signal word.
HbA1c Buffer Solution No signal word.
HbA1c Antibody Latex No signal word.
HbA1c Agglutinator No signal word.
Glass capillary No signal word.

Hazard statements : **HbA1c Oxidant** No known significant effects or critical hazards.
HbA1c Buffer Solution No known significant effects or critical hazards.
HbA1c Antibody Latex No known significant effects or critical hazards.
HbA1c Agglutinator No known significant effects or critical hazards.
Glass capillary No known significant effects or critical hazards.

Precautionary statements

Prevention : **HbA1c Oxidant** Not applicable.
HbA1c Buffer Solution Not applicable.
HbA1c Antibody Latex Not applicable.
HbA1c Agglutinator Not applicable.
Glass capillary Not applicable.

Response : **HbA1c Oxidant** Not applicable.
HbA1c Buffer Solution Not applicable.
HbA1c Antibody Latex Not applicable.
HbA1c Agglutinator Not applicable.
Glass capillary Not applicable.

Storage : **HbA1c Oxidant** Not applicable.
HbA1c Buffer Solution Not applicable.
HbA1c Antibody Latex Not applicable.
HbA1c Agglutinator Not applicable.
Glass capillary Not applicable.

Disposal : **HbA1c Oxidant** Not applicable.
HbA1c Buffer Solution Not applicable.
HbA1c Antibody Latex Not applicable.
HbA1c Agglutinator Not applicable.
Glass capillary Not applicable.

Supplemental label elements : **HbA1c Oxidant** None known.
HbA1c Buffer Solution None known.
HbA1c Antibody Latex None known.
HbA1c Agglutinator None known.
Glass capillary None known.

Hazards not otherwise classified : **HbA1c Oxidant** None known.
HbA1c Buffer Solution None known.
HbA1c Antibody Latex None known.
HbA1c Agglutinator None known.
Glass capillary None known.

Section 3. Composition/information on ingredients

Substance/mixture : **HbA1c Oxidant** Mixture
HbA1c Buffer Solution Mixture
HbA1c Antibody Latex Mixture
HbA1c Agglutinator Mixture
Glass capillary Substance

Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
HbA1c Buffer Solution		
lithium thiocyanate	≤10	556-65-0
HbA1c Agglutinator		
citric acid	<10	77-92-9
Glass capillary		
Heparin, lithium salt	100	9045-22-1

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: HbA1c Oxidant

HbA1c Buffer Solution

HbA1c Antibody Latex

HbA1c Agglutinator

Glass capillary

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation

: HbA1c Oxidant

HbA1c Buffer Solution

HbA1c Antibody Latex

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Remove victim to fresh air and keep at

Section 4. First aid measures

		rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	HbA1c Agglutinator	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	Glass capillary	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	:  HbA1c Oxidant	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	HbA1c Buffer Solution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	HbA1c Antibody Latex	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	HbA1c Agglutinator	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Glass capillary	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	:  HbA1c Oxidant	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	HbA1c Buffer Solution	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	HbA1c Antibody Latex	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	HbA1c Agglutinator	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	Glass capillary	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if

Section 4. First aid measures

symptoms occur.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No known significant effects or critical hazards. No known significant effects or critical hazards.
Inhalation	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No known significant effects or critical hazards. No known significant effects or critical hazards.
Ingestion	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No known significant effects or critical hazards. No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific data. No specific data. No specific data. No specific data. No specific data.
Inhalation	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific data. No specific data. No specific data. No specific data. No specific data.
Skin contact	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific data. No specific data. No specific data. No specific data. No specific data.

Section 4. First aid measures

Ingestion	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific data. No specific data. No specific data. No specific data. No specific data.
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Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	: In case of fire, use water spray (fog), foam or dry chemical.
Unsuitable extinguishing media	: None known.

Specific hazards arising from the chemical : In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides
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Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
For emergency responders	: If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled 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).

Methods and materials for containment and cleaning up

Small spill	: 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.
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Section 6. Accidental release measures

- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 8. Exposure controls/personal protection

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Physical state	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Solid. Liquid. Solid. Solid. Solid.
Color	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Colorless. Not available. Not available. White.
Odor	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Odorless. Odorless. Odorless. Odorless. Not relevant/applicable due to nature of the product.
pH	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not applicable. 9 Not available. Not available. Not applicable.
Flash point	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	[Product does not sustain combustion.] [Product does not sustain combustion.] [Product does not sustain combustion.] [Product does not sustain combustion.] [Product does not sustain combustion.]
Flammability (solid, gas)	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.
Relative density	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. 1 Not available. Not available. Not available.
Solubility(ies) Not available.	:	
Solubility in water	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.
Partition coefficient: n-octanol/water	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.

Section 9. Physical and chemical properties

Auto-ignition temperature	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	the product. Not relevant/applicable due to nature of the product. Not available. Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.
Viscosity	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not relevant/applicable due to nature of the product. Not relevant/applicable due to nature of the product.
<u>Aerosol product</u>		
Type of aerosol	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

Section 10. Stability and reactivity

Reactivity	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	The product is stable. The product is stable. The product is stable. The product is stable. The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.	
Conditions to avoid	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific data. No specific data. No specific data. No specific data. No specific data.
Incompatible materials	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific data. No specific data. No specific data. No specific data. No specific data.

Section 10. Stability and reactivity

Hazardous decomposition products	: HbA1c Oxidant	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	HbA1c Buffer Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	HbA1c Antibody Latex	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	HbA1c Agglutinator	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Glass capillary	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
HbA1c Agglutinator citric acid	LD50 Dermal LD50 Oral	Rat Mouse	>2000 mg/kg 5400 mg/kg	- -

Conclusion/Summary	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.
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Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
HbA1c Agglutinator citric acid	Eyes - Irritant Skin - Not irritant	Rabbit Rabbit	- -	- -	- -

Conclusion/Summary	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.
Skin	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.
Eyes	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.
Respiratory	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.

Sensitization

Product/ingredient name	Route of exposure	Species	Result
HbA1c Agglutinator citric acid	skin	Human	Not sensitizing

Conclusion/Summary	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.
Skin	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.

Section 11. Toxicological information

Respiratory : HbA1c Oxidant Not available.
 HbA1c Buffer Solution Not available.
 HbA1c Antibody Latex Not available.
 HbA1c Agglutinator Not available.
 Glass capillary Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
HbA1c Agglutinator citric acid	OECD 487	Experiment: In vitro Subject: Mammalian-Animal	Positive
	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 475	Experiment: In vivo Subject: Mammalian-Animal	Negative
	EU B.22	Experiment: In vivo Subject: Mammalian-Animal	Negative

Conclusion/Summary : HbA1c Oxidant Not available.
 HbA1c Buffer Solution Not available.
 HbA1c Antibody Latex Not available.
 HbA1c Agglutinator Not available.
 Glass capillary Not available.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
HbA1c Agglutinator citric acid	Negative - Oral - TDLo	Rat	-	2 years

Conclusion/Summary : HbA1c Oxidant Not available.
 HbA1c Buffer Solution Not available.
 HbA1c Antibody Latex Not available.
 HbA1c Agglutinator Not available.
 Glass capillary Not available.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
HbA1c Agglutinator citric acid	Negative	Negative	Negative	Rat	Oral: 50 g/kg	-

Conclusion/Summary : HbA1c Oxidant Not available.
 HbA1c Buffer Solution Not available.
 HbA1c Antibody Latex Not available.
 HbA1c Agglutinator Not available.
 Glass capillary Not available.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
HbA1c Agglutinator citric acid	Negative - Oral	Mouse	>272 mg/kg NOAEL	-
	Negative - Oral	Rabbit	>425 mg/kg NOAEL	-
	Negative - Oral	Rat	>295 mg/kg NOAEL	-

Conclusion/Summary : HbA1c Oxidant Not available.
 HbA1c Buffer Solution Not available.
 HbA1c Antibody Latex Not available.
 HbA1c Agglutinator Not available.
 Glass capillary Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
HbA1c Agglutinator citric acid	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

- : HbA1c Oxidant
- HbA1c Buffer Solution
- HbA1c Antibody Latex
- HbA1c Agglutinator
- Glass capillary

Not available.
Not available.
Not available.
Not available.
Not available.

Potential acute health effects

Eye contact

- : HbA1c Oxidant
- HbA1c Buffer Solution
- HbA1c Antibody Latex
- HbA1c Agglutinator
- Glass capillary

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Inhalation

- : HbA1c Oxidant
- HbA1c Buffer Solution
- HbA1c Antibody Latex
- HbA1c Agglutinator
- Glass capillary

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Skin contact

- : HbA1c Oxidant
- HbA1c Buffer Solution
- HbA1c Antibody Latex
- HbA1c Agglutinator
- Glass capillary

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Ingestion

- : HbA1c Oxidant
- HbA1c Buffer Solution
- HbA1c Antibody Latex
- HbA1c Agglutinator
- Glass capillary

No known significant effects or critical hazards.
No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

Eye contact	: <input checked="" type="checkbox"/> HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific data. No specific data. No specific data. No specific data. No specific data.
Inhalation	: <input checked="" type="checkbox"/> HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific data. No specific data. No specific data. No specific data. No specific data.
Skin contact	: <input checked="" type="checkbox"/> HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific data. No specific data. No specific data. No specific data. No specific data.
Ingestion	: <input checked="" type="checkbox"/> HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	No specific data. No specific data. No specific data. No specific data. No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects	: <input checked="" type="checkbox"/> HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.
Potential delayed effects	: <input checked="" type="checkbox"/> HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.

Long term exposure

Potential immediate effects	: <input checked="" type="checkbox"/> HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.
Potential delayed effects	: <input checked="" type="checkbox"/> HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary	Not available. Not available. Not available. Not available. Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
<input checked="" type="checkbox"/> HbA1c Agglutinator citric acid	Sub-chronic LOAEL Oral Sub-chronic LOAEL Oral	Mouse Rat	2000 mg/kg 8000 mg/kg	10 days 5 days

Conclusion/Summary	: <input checked="" type="checkbox"/> Not available. Not available. Not available. Not available. Not available.	HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator Glass capillary
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General : No known significant effects or critical hazards.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : No known significant effects or critical hazards.

Reproductive toxicity : No known significant effects or critical hazards.

Numerical measures of toxicity

Section 11. Toxicological information

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
HbA1c Buffer Solution HbA1c Buffer Solution lithium thiocyanate	6210.5 500	13663.1 1100	N/A N/A	136.6 11	N/A N/A
HbA1c Agglutinator citric acid	N/A	2500	N/A	N/A	N/A

Interactive effects : HbA1c Oxidant Not available.
 HbA1c Buffer Solution Not available.
 HbA1c Antibody Latex Not available.
 HbA1c Agglutinator Not available.
 Glass capillary Not available.

Other information : HbA1c Oxidant Not available.
 HbA1c Buffer Solution Not available.
 HbA1c Antibody Latex Not available.
 HbA1c Agglutinator Not available.
 Glass capillary Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
HbA1c Agglutinator citric acid	Acute LC50 1535 mg/l Acute LC50 760 mg/l Acute NOEC 425 mg/l	Daphnia Fish Algae	24 hours 48 hours 8 days

Conclusion/Summary : HbA1c Oxidant Not available.
 HbA1c Buffer Solution Not available.
 HbA1c Antibody Latex Not available.
 HbA1c Agglutinator Not available.
 Glass capillary Not available.

Persistence and degradability

Conclusion/Summary : HbA1c Oxidant Not available.
 HbA1c Buffer Solution Not available.
 HbA1c Antibody Latex Not available.
 HbA1c Agglutinator Not available.
 Glass capillary Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
HbA1c Agglutinator citric acid	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
HbA1c Agglutinator citric acid	-1.8	-	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : HbA1c Oxidant Not available.
 HbA1c Buffer Solution Not available.
 HbA1c Antibody Latex Not available.
 HbA1c Agglutinator Not available.
 Glass capillary Not available.

Section 12. Ecological information

Mobility	: <input checked="" type="checkbox"/> HbA1c Oxidant	Not available.
	HbA1c Buffer Solution	Not available.
	HbA1c Antibody Latex	Not available.
	HbA1c Agglutinator	Not available.
	Glass capillary	Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized 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 unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

DOT Classification

UN number	<input checked="" type="checkbox"/> HbA1c Oxidant	Not regulated.
	HbA1c Buffer Solution	Not regulated.
	HbA1c Antibody Latex	Not regulated.
	HbA1c Agglutinator	Not regulated.
	Glass capillary	Not regulated.

UN proper shipping name	<input checked="" type="checkbox"/> HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-

Transport hazard class(es)	<input checked="" type="checkbox"/> HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-

Packing group	<input checked="" type="checkbox"/> HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-

Environmental hazards	<input checked="" type="checkbox"/> HbA1c Oxidant	No.
	HbA1c Buffer Solution	No.
	HbA1c Antibody Latex	No.
	HbA1c Agglutinator	No.
	Glass capillary	No.

Additional information	<input checked="" type="checkbox"/> HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-

TDG Classification

Section 14. Transport information

UN number **☒**HbA1c Oxidant Not regulated.
 HbA1c Buffer Solution Not regulated.
 HbA1c Antibody Latex Not regulated.
 HbA1c Agglutinator Not regulated.
 Glass capillary Not regulated.

UN proper shipping name **☒**HbA1c Oxidant -
 HbA1c Buffer Solution -
 HbA1c Antibody Latex -
 HbA1c Agglutinator -
 Glass capillary -

Transport hazard class(es) **☒**HbA1c Oxidant -
 HbA1c Buffer Solution -
 HbA1c Antibody Latex -
 HbA1c Agglutinator -
 Glass capillary -

Packing group **☒**HbA1c Oxidant -
 HbA1c Buffer Solution -
 HbA1c Antibody Latex -
 HbA1c Agglutinator -
 Glass capillary -

Environmental hazards **☒**HbA1c Oxidant No.
 HbA1c Buffer Solution No.
 HbA1c Antibody Latex No.
 HbA1c Agglutinator No.
 Glass capillary No.

Additional information **☒**HbA1c Oxidant -
 HbA1c Buffer Solution -
 HbA1c Antibody Latex -
 HbA1c Agglutinator -
 Glass capillary -

ADR/RID

UN number **☒**HbA1c Oxidant Not regulated.
 HbA1c Buffer Solution Not regulated.
 HbA1c Antibody Latex Not regulated.
 HbA1c Agglutinator Not regulated.
 Glass capillary Not regulated.

UN proper shipping name **☒**HbA1c Oxidant -
 HbA1c Buffer Solution -
 HbA1c Antibody Latex -
 HbA1c Agglutinator -
 Glass capillary -

Transport hazard class(es) **☒**HbA1c Oxidant -
 HbA1c Buffer Solution -
 HbA1c Antibody Latex -
 HbA1c Agglutinator -
 Glass capillary -

Packing group **☒**HbA1c Oxidant -
 HbA1c Buffer Solution -
 HbA1c Antibody Latex -
 HbA1c Agglutinator -
 Glass capillary -

Section 14. Transport information

Environmental hazards	☑ HbA1c Oxidant	No.
	HbA1c Buffer Solution	No.
	HbA1c Antibody Latex	No.
	HbA1c Agglutinator	No.
	Glass capillary	No.
Additional information	☑ HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-
IMDG		
UN number	☑ HbA1c Oxidant	Not regulated.
	HbA1c Buffer Solution	Not regulated.
	HbA1c Antibody Latex	Not regulated.
	HbA1c Agglutinator	Not regulated.
	Glass capillary	Not regulated.
UN proper shipping name	☑ HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-
Transport hazard class(es)	☑ HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-
Packing group	☑ HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-
Environmental hazards	☑ HbA1c Oxidant	No.
	HbA1c Buffer Solution	No.
	HbA1c Antibody Latex	No.
	HbA1c Agglutinator	No.
	Glass capillary	No.
Additional information	☑ HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-
IATA		
UN number	☑ HbA1c Oxidant	Not regulated.
	HbA1c Buffer Solution	Not regulated.
	HbA1c Antibody Latex	Not regulated.
	HbA1c Agglutinator	Not regulated.
	Glass capillary	Not regulated.
UN proper shipping name	☑ HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-

Section 14. Transport information

Transport hazard class(es)	☒ HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-
Packing group	☒ HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-
Environmental hazards	☒ HbA1c Oxidant	No.
	HbA1c Buffer Solution	No.
	HbA1c Antibody Latex	No.
	HbA1c Agglutinator	No.
	Glass capillary	No.
Additional information	☒ HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
	Glass capillary	-

Special precautions for user : ☒ HbA1c Oxidant

HbA1c Buffer Solution

HbA1c Antibody Latex

HbA1c Agglutinator

Glass capillary

Transport within user's premises:
always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport within user's premises:
always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport within user's premises:
always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments Not applicable.

Section 15. Regulatory information

U.S. Federal regulations : TSCA 4(a) proposed test rules: glycine
 TSCA 8(a) CDR Exempt/Partial exemption: Not determined
 Clean Water Act (CWA) 307: tripotassium hexacyanoferrate

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Not applicable.

Composition/information on ingredients

Name	%	Classification
HbA1c Buffer Solution lithium thiocyanate	≤10	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4
HbA1c Agglutinator citric acid	<10	EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	HbA1c Oxidant tripotassium hexacyanoferrate	13746-66-2	6.7
Supplier notification	HbA1c Oxidant tripotassium hexacyanoferrate	13746-66-2	6.7

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: SUCROSE DUST

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : The following components are listed: .ALPHA.-D-GLUCOPYRANOSIDE, .BETA.-D-FRUCTOFURANOSYL

California Prop. 65

WARNING: This product can expose you to hydrogen cyanide & cyanide salts, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Section 15. Regulatory information

Ingredient name	No significant risk level	Maximum acceptable dosage level
HbA1c Oxidant hydrogen cyanide & cyanide salts	-	Yes.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Section 16. Other information

History

Date of issue/Date of revision : 9/12/2023

Version : 1.06

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- : BCF = Bioconcentration Factor
- : GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- : IATA = International Air Transport Association
- : IBC = Intermediate Bulk Container
- : IMDG = International Maritime Dangerous Goods
- : LogPow = logarithm of the octanol/water partition coefficient
- : MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- : UN = United Nations N/A = Not available SGG = Segregation Group

 Indicates information that has changed from previously issued version.