

# SAFETY DATA SHEET



DCA Systems Hemoglobin A1c Reagent Kit

MSDS  
no.

5035C

## Section 1. Identification

**GHS product identifier** : DCA Systems Hemoglobin A1c Reagent Kit

**Product code** : 5035C, 10311134, 06162000, 10888639

**Other means of identification** : HbA1c Oxidant  
 HbA1c Buffer Solution  
 HbA1c Antibody Latex T65-2063-01  
 HbA1c Agglutinator

**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  
 (800) 424-9300 (CHEMTREC) (24/365)

## Section 2. Hazards identification

**OSHA/HCS status** : HbA1c Oxidant This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
 HbA1c Buffer Solution This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
 HbA1c Antibody Latex This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  
 HbA1c Agglutinator This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** : HbA1c Oxidant Not classified.  
 HbA1c Buffer Solution Not classified.  
 HbA1c Antibody Latex Not classified.  
 HbA1c Agglutinator Not classified.

### 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.

**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.

### Precautionary statements

## Section 2. Hazards identification

<b>Prevention</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Response</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Storage</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	None known. None known. None known. None known.
<b>Hazards not otherwise classified</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	None known. None known. None known. None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Mixture Mixture Mixture Mixture
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Ingredient name	%	CAS number
<b>HbA1c Buffer Solution</b> lithium thiocyanate	8.1	556-65-0
<b>HbA1c Agglutinator</b> citric acid	5	77-92-9

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

<b>Eye contact</b>	: HbA1c Oxidant	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.
	HbA1c Buffer Solution	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.
	HbA1c Antibody Latex	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.

## Section 4. First aid measures

	HbA1c Agglutinator	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.
<b>Inhalation</b>	: HbA1c Oxidant	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.
	HbA1c Buffer Solution	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.
	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.
	HbA1c Agglutinator	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
<b>Skin contact</b>	: 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.
<b>Ingestion</b>	: HbA1c Oxidant	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small

## Section 4. First aid measures

HbA1c Antibody Latex

quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

##### **Eye contact**

: 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.

##### **Inhalation**

: HbA1c Oxidant

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

HbA1c Buffer Solution

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

HbA1c Antibody Latex

Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

HbA1c Agglutinator

No known significant effects or critical hazards.

##### **Skin contact**

: 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.

##### **Ingestion**

: 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.

#### Over-exposure signs/symptoms

## Section 4. First aid measures

<b>Eye contact</b>	: HbA1c Oxidant	No specific data.
	: HbA1c Buffer Solution	No specific data.
	: HbA1c Antibody Latex	No specific data.
	: HbA1c Agglutinator	No specific data.
<b>Inhalation</b>	: HbA1c Oxidant	No specific data.
	: HbA1c Buffer Solution	No specific data.
	: HbA1c Antibody Latex	No specific data.
	: HbA1c Agglutinator	No specific data.
<b>Skin contact</b>	: HbA1c Oxidant	No specific data.
	: HbA1c Buffer Solution	No specific data.
	: HbA1c Antibody Latex	No specific data.
	: HbA1c Agglutinator	No specific data.
<b>Ingestion</b>	: HbA1c Oxidant	No specific data.
	: HbA1c Buffer Solution	No specific data.
	: HbA1c Antibody Latex	No specific data.
	: HbA1c Agglutinator	No specific data.

### Indication of immediate medical attention and special treatment needed, if necessary

<b>Notes to physician</b>	: 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.
<b>Specific treatments</b>	: No specific treatment.
<b>Protection of first-aiders</b>	: 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

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

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

<b>Hazardous thermal decomposition products</b>	: 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

<b>For non-emergency personnel</b>	: 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.
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## Section 6. Accidental release measures

- For emergency responders** : If specialised 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.
- 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.

## 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.

## Section 8. Exposure controls/personal protection

- 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.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

## Section 9. Physical and chemical properties

<b>Physical state</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Solid. Liquid. Solid. Solid.
<b>Color</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Colorless. Not available. Not available.
<b>Odor</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Odorless. Odorless. Odorless. Odorless.
<b>pH</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not applicable. 9 Not available. Not available.
<b>Flash point</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.
<b>Flammability (solid, gas)</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.
<b>Relative density</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. 1 Not available. Not available.
<b>Solubility in water</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.
<b>Partition coefficient: n-octanol/water</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.

## Section 9. Physical and chemical properties

<b>Auto-ignition temperature</b>	: HbA1c Oxidant	Not available.
	HbA1c Buffer Solution	Not available.
	HbA1c Antibody Latex	Not available.
	HbA1c Agglutinator	Not available.
<b>Viscosity</b>	: HbA1c Oxidant	Not available.
	HbA1c Buffer Solution	Not available.
	HbA1c Antibody Latex	Not available.
	HbA1c Agglutinator	Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: HbA1c Oxidant	No specific test data related to reactivity available for this product or its ingredients.
	HbA1c Buffer Solution	No specific test data related to reactivity available for this product or its ingredients.
	HbA1c Antibody Latex	No specific test data related to reactivity available for this product or its ingredients.
	HbA1c Agglutinator	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: HbA1c Oxidant	The product is stable.
	HbA1c Buffer Solution	The product is stable.
	HbA1c Antibody Latex	The product is stable.
	HbA1c Agglutinator	The product is stable.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.	
<b>Conditions to avoid</b>	: No specific data.	
<b>Incompatible materials</b>	: No specific data.	
<b>Hazardous decomposition products</b>	: 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
<b>HbA1c Agglutinator</b> Citric acid	LD50 Oral	Rat	3 g/kg	-

<b>Conclusion/Summary</b>	: HbA1c Oxidant	Not available.
	HbA1c Buffer Solution	Not available.
	HbA1c Antibody Latex	Not available.
	HbA1c Agglutinator	Not available.

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>HbA1c Agglutinator</b> Citric acid	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Moderate irritant	Rabbit	-	0.5 Milliliters	-

#### Conclusion/Summary



## Section 11. Toxicological information

<b>Skin</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.
<b>Eyes</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.
<b>Respiratory</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.

### Sensitization

Not available.

### Conclusion/Summary

<b>Skin</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.
<b>Respiratory</b>	: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.

### Mutagenicity

Not available.

### Conclusion/Summary

: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.
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### Carcinogenicity

Not available.

### Conclusion/Summary

: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.
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### Reproductive toxicity

Not available.

### Conclusion/Summary

: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.
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### Teratogenicity

Not available.

### Conclusion/Summary

: HbA1c Oxidant HbA1c Buffer Solution HbA1c Antibody Latex HbA1c Agglutinator	Not available. Not available. Not available. Not available.
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### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

## Section 11. Toxicological information

**Information on the likely routes of exposure** : Not available.

### Potential acute health effects

<b>Eye contact</b>	: 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.
<b>Inhalation</b>	: HbA1c Oxidant	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	HbA1c Buffer Solution	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	HbA1c Antibody Latex	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
	HbA1c Agglutinator	No known significant effects or critical hazards.
<b>Skin contact</b>	: 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.
<b>Ingestion</b>	: 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.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: HbA1c Oxidant	No specific data.
	HbA1c Buffer Solution	No specific data.
	HbA1c Antibody Latex	No specific data.
	HbA1c Agglutinator	No specific data.
<b>Inhalation</b>	: HbA1c Oxidant	No specific data.
	HbA1c Buffer Solution	No specific data.
	HbA1c Antibody Latex	No specific data.
	HbA1c Agglutinator	No specific data.
<b>Skin contact</b>	: HbA1c Oxidant	No specific data.
	HbA1c Buffer Solution	No specific data.
	HbA1c Antibody Latex	No specific data.
	HbA1c Agglutinator	No specific data.
<b>Ingestion</b>	: HbA1c Oxidant	No specific data.
	HbA1c Buffer Solution	No specific data.
	HbA1c Antibody Latex	No specific data.
	HbA1c Agglutinator	No specific data.

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

#### Short term exposure

## Section 11. Toxicological information

<b>Potential immediate effects</b>	: HbA1c Oxidant	Not available.
	: HbA1c Buffer Solution	Not available.
	: HbA1c Antibody Latex	Not available.
	: HbA1c Agglutinator	Not available.
<b>Potential delayed effects</b>	: HbA1c Oxidant	Not available.
	: HbA1c Buffer Solution	Not available.
	: HbA1c Antibody Latex	Not available.
	: HbA1c Agglutinator	Not available.

### Long term exposure

<b>Potential immediate effects</b>	: HbA1c Oxidant	Not available.
	: HbA1c Buffer Solution	Not available.
	: HbA1c Antibody Latex	Not available.
	: HbA1c Agglutinator	Not available.
<b>Potential delayed effects</b>	: HbA1c Oxidant	Not available.
	: HbA1c Buffer Solution	Not available.
	: HbA1c Antibody Latex	Not available.
	: HbA1c Agglutinator	Not available.

### Potential chronic health effects

Not available.

<b>Conclusion/Summary</b>	: Not available.	HbA1c Oxidant
	: Not available.	HbA1c Buffer Solution
	: Not available.	HbA1c Antibody Latex
	: Not available.	HbA1c Agglutinator

**General** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Route	ATE value
<b>HbA1c Buffer Solution</b>	
Oral	6172.8 mg/kg
Dermal	13580.2 mg/kg
Inhalation (vapors)	135.8 mg/l
<b>HbA1c Agglutinator</b>	
Oral	60000 mg/kg

<b>Interactive effects</b>	: HbA1c Oxidant	Not available.
	: HbA1c Buffer Solution	Not available.
	: HbA1c Antibody Latex	Not available.
	: HbA1c Agglutinator	Not available.

<b>Other information</b>	: HbA1c Oxidant	Not available.
	: HbA1c Buffer Solution	Not available.
	: HbA1c Antibody Latex	Not available.
	: HbA1c Agglutinator	Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
HbA1c Agglutinator Citric acid	Acute LC50 160000 µg/l Marine water	Crustaceans - Carcinus maenas - Adult	48 hours

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

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
HbA1c Agglutinator Citric acid	-1.8	-	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : HbA1c Oxidant Not available.  
 HbA1c Buffer Solution Not available.  
 HbA1c Antibody Latex Not available.  
 HbA1c Agglutinator Not available.

**Mobility** : HbA1c Oxidant Not available.  
 HbA1c Buffer Solution Not available.  
 HbA1c Antibody Latex Not available.  
 HbA1c Agglutinator 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** HbA1c Oxidant Not regulated.  
 HbA1c Buffer Solution Not regulated.  
 HbA1c Antibody Latex Not regulated.  
 HbA1c Agglutinator Not regulated.

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

## Section 14. Transport information

<b>Transport hazard class(es)</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

<b>Packing group</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

<b>Environmental hazards</b>	HbA1c Oxidant	No.
	HbA1c Buffer Solution	No.
	HbA1c Antibody Latex	No.
	HbA1c Agglutinator	No.

<b>Additional information</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

### TDG Classification

<b>UN number</b>	HbA1c Oxidant	Not regulated.
	HbA1c Buffer Solution	Not regulated.
	HbA1c Antibody Latex	Not regulated.
	HbA1c Agglutinator	Not regulated.

<b>UN proper shipping name</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

<b>Transport hazard class(es)</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

<b>Packing group</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

<b>Environmental hazards</b>	HbA1c Oxidant	No.
	HbA1c Buffer Solution	No.
	HbA1c Antibody Latex	No.
	HbA1c Agglutinator	No.

<b>Additional information</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

### Mexico Classification

<b>UN number</b>	HbA1c Oxidant	Not regulated.
	HbA1c Buffer Solution	Not regulated.
	HbA1c Antibody Latex	Not regulated.
	HbA1c Agglutinator	Not regulated.

## Section 14. Transport information

<b>UN proper shipping name</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Transport hazard class(es)</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Packing group</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Environmental hazards</b>	HbA1c Oxidant	No.
	HbA1c Buffer Solution	No.
	HbA1c Antibody Latex	No.
	HbA1c Agglutinator	No.
<b>Additional information</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

### ADR/RID

<b>UN number</b>	HbA1c Oxidant	Not regulated.
	HbA1c Buffer Solution	Not regulated.
	HbA1c Antibody Latex	Not regulated.
	HbA1c Agglutinator	Not regulated.
<b>UN proper shipping name</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Transport hazard class(es)</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Packing group</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Environmental hazards</b>	HbA1c Oxidant	No.
	HbA1c Buffer Solution	No.
	HbA1c Antibody Latex	No.
	HbA1c Agglutinator	No.
<b>Additional information</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

### IMDG

## Section 14. Transport information

<b>UN number</b>	HbA1c Oxidant	Not regulated.
	HbA1c Buffer Solution	Not regulated.
	HbA1c Antibody Latex	Not regulated.
	HbA1c Agglutinator	Not regulated.
<b>UN proper shipping name</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Transport hazard class(es)</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Packing group</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Environmental hazards</b>	HbA1c Oxidant	No.
	HbA1c Buffer Solution	No.
	HbA1c Antibody Latex	No.
	HbA1c Agglutinator	No.
<b>Additional information</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

### IATA

<b>UN number</b>	HbA1c Oxidant	Not regulated.
	HbA1c Buffer Solution	Not regulated.
	HbA1c Antibody Latex	Not regulated.
	HbA1c Agglutinator	Not regulated.
<b>UN proper shipping name</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Transport hazard class(es)</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Packing group</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-
<b>Environmental hazards</b>	HbA1c Oxidant	No.
	HbA1c Buffer Solution	No.
	HbA1c Antibody Latex	No.
	HbA1c Agglutinator	No.
<b>Additional information</b>	HbA1c Oxidant	-
	HbA1c Buffer Solution	-
	HbA1c Antibody Latex	-
	HbA1c Agglutinator	-

## Section 14. Transport information

**Special precautions for user** : HbA1c Oxidant

HbA1c Buffer Solution

HbA1c Antibody Latex

HbA1c Agglutinator

**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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**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 Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

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

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not 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



## Section 15. Regulatory information

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
<b>HbA1c Buffer Solution</b> lithium thiocyanate	8.1	No.	No.	No.	Yes.	No.
<b>HbA1c Agglutinator</b> Citric acid	5	No.	No.	No.	Yes.	No.

### 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 contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
<b>HbA1c Oxidant</b> ferrate(3-), hexakis(cyano-c)-, tripotassium, (oc-6-11)-	No.	Yes.	No.	No.

### International regulations

- Chemical Weapons Convention List Schedule I Chemicals** : HbA1c Oxidant Not listed  
HbA1c Buffer Solution Not listed  
HbA1c Antibody Latex Not listed  
HbA1c Agglutinator Not listed
- Chemical Weapons Convention List Schedule II Chemicals** : HbA1c Oxidant Not listed  
HbA1c Buffer Solution Not listed  
HbA1c Antibody Latex Not listed  
HbA1c Agglutinator Not listed
- Chemical Weapons Convention List Schedule III Chemicals** : HbA1c Oxidant Not listed  
HbA1c Buffer Solution Not listed  
HbA1c Antibody Latex Not listed  
HbA1c Agglutinator Not listed

## Section 16. Other information

### History

**Date of issue/Date of revision** : 1/22/2016.

**Version** : 1.04

### 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 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
UN = United Nations

## Section 16. Other information

✔ Indicates information that has changed from previously issued version.

[Notice to reader](#)

**Allergen** : Not available.