

Safety Data Sheet

Haemoglobin A1c Liquid Control Levels 1 and 2

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1. Identification of material and supplier

Product Name: Haemoglobin A1c Liquid Stable Controls Levels 1 and 2

Other Names: HbA1c Liquid Controls [B12396 (HB410B); B12397 (HB410MBB)]

Recommended Use of the Chemical

Liquid state human blood lysate matrix for in vitro diagnostic use as quality control material to assess laboratory instruments/reagent systems.

Supplier: Canterbury Scientific Limited

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Christchurch, New Zealand, 8011

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E-mail: info@canterburyscientific.com

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6827 AT Arnhem, The Netherlands

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Street Address: 250 S Kraemer Blvd
Brea,
CA 92821, USA

Telephone: +1-714-961-3659

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2. Hazards Identification

NOTE: This product contains a small quantity of Potassium Cyanide (KCN) (<0.5%). Due to the hazardous nature of KCN no allowance for dilution is permitted in classification therefore hazard classification reflects this.

Signal Word: Danger



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HSNO (1)	GHS7 (2)	Hazard Statement Code
6.1A (all, Oral), Dermal, Inhalation)	Acute Toxicity Oral Category 1 Acute Toxicity Skin Category 1 Acute Toxicity Inhalation Category 1	H300 Fatal if swallowed H310 Fatal in contact with skin H330 Fatal if inhaled
6.3B	Skin Corrosion / Irritation Category 3	H316 Causes mild skin irritation
6.4A	Serious Eye Damage / eye irritant category 2	H319 Causes serious eye irritation
6.5B	Skin Sensitivity Category 1	H317 May cause allergic skin reaction
6.8B	Reproduction Category 2	H361 Suspected of causing fertility damage or the unborn child
6.9A (all, oral)	Specific target organ toxicity (Single exposure) Category 1	H370 Causes damage to organs
	Specific target organ toxicity (repeated exposure) Category 1	H372 Causes damage to organs through prolonged or repeated exposure
8.1A	Corrosive to metals Category 1	H290 May be corrosive to metals
9.1A (all, Crustacean, fish, algal)	Aquatic toxicity Category 1	H400 / H410 Very toxic to aquatic life
9.2A	None	H421 Very toxic to the soil environment.
9.3A	None	H431 Very toxic to terrestrial vertebrates.
9.4A	None	H441 Very toxic to terrestrial invertebrates.

3. Composition / Information on ingredients

Ingredient	CAS #	Content %	Classed as:
Haemoglobin	N/A	<50	Non-Hazardous
Potassium Cyanide	151-50-8	<0.05	Hazardous
Diluent	N/A	To 100%	Non-Hazardous

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4. First Aid Measures

Eyes:

Immediately flush out 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.

Skin:

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur

Ingestion:

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

Inhalation:

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

Self-protection for First Aider:

No action shall be taken involving any personal risk or without suitable training.
Wear nitrile gloves and eye protection

Poison Centre contact number: 0800 764 766

5. Fire Fighting Measures

Flash Point:

Not determined

Flammability limits:

Unknown

HAZCHEM Code:

2Z

Extinguishing media

In case of fire, use water spray, foam or dry chemical

Fire and explosion hazards:

No specific data for hazardous thermal decomposition products

Fire-fighting equipment:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in a positive pressure mode

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6. Accidental Release Measures

Action to take for spills or leaks

Personal precautions, protective equipment, and emergency procedures:

Dress in full cover overalls, gloves, eye protection

Only trained personnel to approach spill to conduct clean up.

Environmental precautions from accidental spills and releases:

Avoid dispersal of spilled material or 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).

Advice on containment and clean-up of spill or release:

Bund to prevent runoff,

Absorb with inert absorbent material, collect and place into a sealable container, dispose according to local authority guidelines or regulations.

7. Handling and Storage

Precautions to be taken in Handling and Storage

Handling:

Put on appropriate personal protective equipment. 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

Storage (including incompatibilities):

Product to be stored under controlled conditions 2°C - 8°C

8. Exposure Controls / Personal Protection

Occupational exposure limits (including biological limit values):

None

Engineering controls:

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Personal Protective Equipment:

Hygiene:

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



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Skin protection

Chemical-resistant, impervious gloves complying with an approved standard should always be worn when handling chemical products if a risk assessment indicates this is necessary. 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. 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



Eye 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



Environmental 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.

9. Physical and Chemical Properties

Property	Characteristic
Appearance	Liquid, Cherry Red
Odour	Weak smell of blood
Odour threshold	Not Available
pH	Not Available
Melting point / freezing point	Not Available
Initial Boiling Point & boiling range	Not Available
Flash Point	Not Available
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper / lower flammability or explosive limits	Not Available
Vapour Pressure	Not Available
Vapour Density	Not Available
Relative density	Not Available
Solubility in water	Not Available
Partition coefficient: n-octane/water	Not Available
Auto ignition temperature	Not Available
Decomposition temperature	Not Available
Kinematic viscosity	Not Available
Explosive properties	Not Available
Oxidising properties	Not Available

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10. Stability and Reactivity

Chemical reactivity and chemical stability of the substance under normal and anticipated storage and handling conditions

Reactivity:

No Specific data

Chemical stability:

chemically stable under recommended storage/use conditions

Possible hazardous reactions:

Under normal conditions of storage and use in Information of Use, hazardous reactions will not occur

Conditions to avoid:

No Specific data

Incompatibility (Material to avoid)

No Specific data

Hazardous decomposition products

Under normal conditions of storage and use, no known hazardous decomposition products are formed during the shelf life of the product

11. Toxicological Information:

Toxicological information provided for:

Acute toxicity (6.1A, 6.1B, 6.1C, 6.1D)

Component	Exposure limit (8hr) mg/m ³	LD50
Haemoglobin	None	None
Potassium Cyanide	5 (OSHA PEL), 0.9 (ECHA)	Oral 7.49 mg/kg body weight (rat) (ECHA)

Skin corrosion / irritation (6.3A)

Component	Exposure limit (8hr) mg/m ³	
Haemoglobin	None	None
Potassium Cyanide	5 (OSHA PEL), 140µg / kg / day (ECHA)	LD50 7.35 - 200 mg/kg bw (rabbit) (ECHA)

Serious eye damage / irritation (6.4A)

Component	Exposure limit (8hr) mg/m ³	
Haemoglobin	None	None
Potassium Cyanide	5 (OSHA PEL), no threshold (ECHA)	LC50 7.87 mg/kg bw (rabbit)

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Respiratory or skin irritations (6.5B)

Component	Exposure limit (8hr) mg/m ³	
Haemoglobin	None	None
Potassium Cyanide	5 (OSHA PEL), 0.9 (ECHA)	LC50 (60 min) 63 ppm (rat) (ECHA)

Reproductive toxicity (6.8A, 6.8B, 6.8C)

Component	Exposure limit (8hr) mg/m ³	
Haemoglobin	None	None
Potassium Cyanide	5 (OSHA PEL), 0.9 (ECHA)	LC50 7.87 mg/kg bw (rabbit)

Specific target organ toxicity (repeated and single exposure) (6.9A, 6.9B)

Component	Exposure limit (8hr) mg/m ³	
Haemoglobin	None	None
Potassium Cyanide	5 (OSHA PEL), 0.9 (ECHA)	LC50 7.87 mg/kg bw (rabbit)

Narcotic effects (6.9B)

None

Summarised data:

All components except Potassium Cyanide are considered not hazardous. Potassium Cyanide has no cut off level for dilution hence the identified hazards and exposure limits apply for any concentration in this mixture.

12. Ecological Information:

Basic property data requirements:

All components except KCN classed as non-hazardous

Potassium Cyanide Ecotoxicity (aquatic & terrestrial)

Aquatic Species location (ECHA)	Predicted No Effect Concentration
Freshwater	1 µg/L
Intermittent releases (freshwater)	3.2 µg/L
Marine water	200 ng/L
Intermittent releases (marine water)	None
Sewage treatment plant (STP)	50 µg/L
Sediment (freshwater)	4 µg/kg sediment dry weight
Sediment (marine water)	800 ng/kg sediment dry weight

Further Ecological Hazards

Hazard Location (ECHA)	Predicted No Effect Concentration
Air	No hazard identified
Soil	7 µg/kg soil dry weight
Predator secondary poisoning	No potential for bioaccumulation

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13. Disposal Considerations:

Disposal methods:

The generation of waste should be avoided or minimized whenever possible.

Disposal of this product, solutions and any by-products should always comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus not to be disposed of un-tested to the sewer unless fully compliant with 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 run off and contact with soil, waterways, drains and sewers

14. Transport Information:

Regulator information relating to transport

Dangerous Goods classification:

Description	Classification
UN No.	Not Classified
UN Proper Shipping Name	Not Classified
UN DG class & subsidiary risk	Not Classified
UN Packaging group	Not Classified
Environmental hazards (e.g. marine pollutant)	Not Classified
Special precautions when transporting	Not Classified

15. Regulatory Information:

Includes NZ & international regulatory information

HSNO approval number: Not Classified

This product is not classified according to EU legislation

This product is not classified according to USA legislation

This product is not classified according to Japan legislation

This product is not classified according to Canada legislation

This product is not classified according to China legislation

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16. Other Information:

Glossary:

HSNO: Hazardous Substances and New Organisms Act 1996

GHS 7: Global Harmonisation System Seventh Revised Edition

UN: United Nations

ECHA: European Chemical Agency

OSHA: Occupational Safety and Health Administration (USA)

PEL: Permissible Exposure Limit

KCN: Potassium Cyanide

DG: Dangerous Goods

REACH: Registration, Evaluation, Authorisation, and Restriction of Chemicals

References:

Hazardous Substances and New Organisms Act 1996

Global Harmonisation System Seventh Revised Edition

European Chemical Agency Guidance on the compilation of safety data sheets Version 3.1 November 2015

European Community EC No 1907/2006 (REACH)

Workplace Exposure Standards and Biological Indices 11th Edition November 2019, WorkSafe NZ

Notice to Readers:

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When the revision of this SDS is received, please dispose of the old one.