

Material Safety Data Sheet

SECTION 1 – PRODUCT INFORMATION

Product Name: Cambrian gDNA Isolation from Whole Blood Sample

Buffer SKU No: CBWM068.S

Supplier Address: Cambrian Biotech PVT LTD
M-11, Peenya 1st Stage,
Peenya III Phase,
Peenya, Bengaluru,
Karnataka 560058

Company Link: <https://cambrianbioworks.com>

Product use: For nucleic acid (gDNA) extraction from human blood samples

SECTION 2 – HAZARD IDENTIFICATION

Hazard Description:

Irritant Information pertaining to particular dangers for man and environment:

NFPA Ratings (Scale 0-4):

Health = 2

Flammability = 0

Reactivity = 0

Hazard Statements:

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

Prevention Precautionary Statements:

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.

P270 - Do not eat, drink or smoke when using this product.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P264 - Wash all exposed external body areas thoroughly after handling.

Response Precautionary Statements:

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

P362 - Take off contaminated clothing and wash before reuse.

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313 - If skin irritation occurs: Get medical advice/attention.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %
Guanidine Hydrochloride	50-01-1	40%-70%
Non-ionic surfactant*	Not available	5%-25%
Trisaminomethane	77-86-1	40%-70%
Sodium Dodecyl Sulphate	50-01-1	0.05%-5%
EDTA	6381-92-6	0.25%-2%
Binding Enhancer*	-	2%-30%

*The exact name and/or the percentage/composition of the specific chemical component has been withheld as a trade secret.

SECTION 4 - FIRST AID MEASURES

Skin Contact: Wash immediately with water and soap and rinse thoroughly. Seek immediate medical advice.

Eye Contact: Rinse the eye for several minutes under running water. Then consult a doctor.

Ingestion: Seek immediate medical advice.

Inhalation: Supply fresh air. If required, provide artificial respiration. Seek immediate medical advice.

SECTION 5 – FIRE FIGHTING PROCEDURES

Suitable extinguishing media: Water spray / Dry powder / Foam.

Protection during firefighting: Use appropriate protective equipment during firefighting.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency procedures: Ventilate spillage area.

Personal precautions: -

Protective gear: Use appropriate protective equipment in case of any accidental release.

Environmental precautions: Avoid release into the environment. Prevent the product from entering drains or groundwater systems.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material.

SECTION 7 – HANDLING AND STORAGE

Precautions for safe handling: Provide appropriate ventilation of the workstation. Personnel should wear personal protective equipment at all times.

Storage conditions: The product should be kept in a well ventilated and cool place.

Storage temperature: Recommended at Room temperature.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Hand protection: Personnel should wear gloves at all given times.

Eye protection: Personnel should wear protective safety glasses.

Skin and Body protection: Personnel should wear protective clothing.

Hygiene measures: Overall industry-standard hygiene practices should be followed.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on physical and chemical properties

Physical state	Liquid
Appearance	Colourless
Odor	None
Odor threshold	No data available

Property	Values
pH	4.5-8.5
Melting point / freezing point	1580°C
Boiling point / boiling range	2861°C
Flash point	910°C
Evaporation rate	No data available
Flammability (solid, gas)	00.00
Flammability Limit in Air	00.00
Upper flammability or explosive limits	No data available
Lower flammability or explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Water solubility	Soluble in water
Solubility in other solvents	No data available
Partition coefficient	No data available
Autoignition temperature	No data available
Hyphen	No data available

Kinematic viscosity No data available
Dynamic viscosity No data available

Other information

Explosive properties Unexplosive

Oxidizing properties No information available
Softening point No information available
Molecular weight No information available
VOC Content (%) No information available
Liquid Density No information available
Bulk density No information available

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature under normal conditions.

Thermal decomposition/condition to be avoided: Decomposition will not occur if used and stored according to specifications.

Materials to be avoided: Strong acids, strong bases and oxidizing agents.

Dangerous reactions: No dangerous reactions known.

Dangerous products of decomposition: No dangerous decomposition products known.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity

Specific Component Information:

Component	Oral LD50	Dermal LD50
Guanidine Hydrochloride	571 mg/kg in mouse	2000 mg/kg in rabbit
EDTA	400 mg/kg in mouse	-
*Non-ionic surfactant	1,800 mg/kg in rat	8,000 mg/kg in rabbit

Primary irritant effect

On the skin: Irritant to skin and mucous membranes.

On the eye: Irritating effect.

Sensitization: No sensitizing effects known.

SECTION 12- ECOLOGICAL INFORMATION

Toxicity

Chemical name	Algae/Aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Guanidine Hydrochloride	EC50 - Pseudokirchneriella subcapitata (green algae) - 33.5 mg/l - 72 h	NA	EC10 - <i>Pseudomonas putida</i> - 7.125 mg/l - 18 h	EC50 - <i>Daphnia magna</i> (Water flea) - 70.2 mg/l - 48 h
EDTA	NA	LC50 - <i>Lepomis macrochirus</i> - 41 mg/mL - 96 h	NA	NA

Persistence and degradability: No further relevant information available.

Behavior in environmental systems

Bioaccumulative potential: No further relevant information available.

Mobility in soil: No further relevant information available.

Additional ecological information

General notes

Water hazard class 1 (Assessment by list): Slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach groundwater, water course or sewage system.

Results of PBT and vPvB assessment

PBT: The following mixture does not contain any component considered to be persistent, bioaccumulative and toxic (PBT)

vPvB: The following mixture does not contain any component considered to be very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher

SECTION 13 – DISPOSAL CONSIDERATIONS

Product disposal: Follow appropriate government rules and regulations for disposal. Prevent draining the product into drains or water systems.

SECTION 14 – TRANSPORT INFORMATION

Environmental hazards: no IMDG Marine pollutant/ no IATA. Not classified as dangerous in the meaning of transport regulations.

Mode of transport Air: Not a dangerous product. Not classified as dangerous in the meaning of transport regulations as per IATA

Mode of transport Land: Not a dangerous product as per RID

Mode of transport Sea: Not a dangerous product as per IMDG/IMO

SECTION 15 – REGULATORY INFORMATION

Product related hazard information:

Hazard symbols: Xi

Irritant Risk phrases: 33 Danger of cumulative effects.

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

Safety phrases: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves.

SECTION 16 – OTHER INFORMATION

Additional information: The information provided is correct and it can be referred to as a guide for handling the product. Cambrian Bio works not responsible for any damages occurred due to mishandling or misconsumption.