

Safety Data Sheet

GeneDireX UltraScience Western Substrate Series– Solution A

1. IDENTIFICATION OF THE PREPARATION/SUBSTANCE AND OF THE COMPANY

Preparation Name: GeneDireX UltraScience Pico Plus Western Substrate

GeneDireX UltraScience Pico Ultra Western Substrate

GeneDireX UltraScience Femto Western Substrate

Catalog Number: CCH321-B100ML(N)/CCH345-B100ML(N)/CCH365-B100ML(N)

Use of the preparation: For laboratory use.

Company identification: BIO-HELIX Co., LTD.

Site: <http://www.bio-helix.com>

E-mail: info@bio-helix.com

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredients:

Chemical name	% Conc.	CAS#	EC#	INDEX#	Classification 1272/2008 (CLP).
Tris	1.1-3.8	77-86-1	201-064-4	*	Eye Irrit. 2 H319, STOT SE 3 H335, Skin Irrit. 2 H315
Hydrochloric acid	0.01-0.13	7647-01-0	231-595-7	017-002-01-X	Skin Corr. 1B H314, STOT SE3 H335

Chemical characterization

Description: Solution, consisting of the following components.

Other components: Components not listed here are not hazardous or their concentrations do not exceed the limits specified in the OSHA Hazard Communication Standard 29.CFR 1910.1200.

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+),

F = Highly Flammable(F), N = Dangerous for the Environment(N)

3. HAZARDS IDENTIFICATION

Form: Liquid

Principle Routes of Exposure/Potential Health effects

Eyes May cause eye irritation with susceptible persons.

Skin May cause skin irritation and/or dermatitis.

Inhalation No information available.

Ingestion Harmful if swallowed.

Specific effects

Safety Data Sheet

Carcinogenic effects	No information available.
Mutagenic effects	No information available.
Reproductive toxicity	No information available.
Sensitization	No information available
Target Organ Effects	No information available

HMIS

Health	0
Reactivity	0
Flammability	0

4. First Aid Measures

Ingestion :Never give anything by mouth to an unconscious person. Consult a physician.

Inhalation :Move to fresh air. If symptoms persist, call a physician.

Skin contact: Wash off immediately with plenty of water. If symptoms persist, call a physician.

Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

If eye irritation persists, consult a specialist.

Notes to physician : Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing agents : Dry chemical.

Protective equipment: Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Use personal protective equipment.

Methods for cleaning up : Soak up with inert absorbent material.

Additional information : No dangerous substances are released.

7. HANDLING AND STORAGE

Handling : Wash thoroughly after handling. Wash hands before eating. Keep container tightly closed.

Use with adequate ventilation.

Storage : Keep container closed when not in use. Store at room temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with limit values that require monitoring at the workplace : The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information :

General protective and hygienic measures : Prevent product from entering drains.

Engineering measures : Ensure adequate ventilation, especially in confined areas.

Personal protection : In case of insufficient ventilation wear suitable respiratory equipment

- Respiratory protection : Protective gloves.

Safety Data Sheet

- Hand protection : Safety glasses with side-shields.
 - Eye protection : Lightweight protective clothing.
 - Skin protection : Handle in accordance with good industrial hygiene and safety practice.
- Environmental Exposure Controls : In case of insufficient ventilation wear suitable respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Appearance : Liquid.

Color : Colorless.

Odor : Odorless.

Boiling point : Not applicable.

Melting point : Not applicable.

Flash Point : Not applicable.

Autoignition temperature : Do not auto ignition.

Oxidizing properties : Not applicable.

Solubility in/miscibility with water : Moderate.

10. STABILITY AND REACTIVITY

Stability : Stable under normal conditions.

Materials to avoid : Metals.

Hazardous decomposition products : No information available.

Hazardous polymerization : Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity : No irritant effect.

Primary irritant effect : No irritant effect.

On the skin : No irritant effect.

On the eye : No irritant effect.

Sensitization : No sensitizing effects known.

12. ECOLOGICAL INFORMATION

Ecotoxicity : No information available.

Mobility : No information available.

Biodegradation : No information available.

Bioaccumulation : No information available.

13. DISPOSAL CONSIDERATIONS

Recommendation : Dispose according to current regional and national rules.

Safety Data Sheet

14. TRANSPORT INFORMATION

Proper shipping name : Not classified as dangerous in the meaning of transport regulations.

Road/Railway Haulage ADR/RID : Not restricted.

Sea Freight IMO (IMDG) : Not restricted.

Air Freight IATA (ICAO) : Not restricted.

UN Number : Not restricted.

15. REGULATORY INFORMATION

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

None of the chemicals in this product are considered highly hazardous by OSHA.

16. OTHER INFORMATION

This material is sold for research and development purposes only. It is not for any human or animal therapeutic or clinical diagnostic use. It is not intended for food, drug, household, agricultural, or cosmetic use. An individual technically qualified to handle potentially hazardous chemicals must supervise the use of this material.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may be present unknown hazards and should be used with caution. Since Bio-Helix Co., Ltd. cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. The information in this SDS does not constitute a warranty, express or implied, including any implied warranty of merchantability or fitness for any particular purpose.