Advanced Electrophoresis Solutions Ltd.

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **500 mM Arginine Solution**
Part Number: **101100**
Manufacturer: Advanced Electrophoresis Solutions Ltd.
Address: 380 Jamieson Parkway, Cambridge, ON N3C 4N4, Canada
Support Email: support@aeslifesciences.com
Business Phone: (519) 653-6888
For Chemical Emergency Phone# (416) 995 9730

2. HAZARDS IDENTIFICATION

Classification

Classification under 2012 OSHA Hazard Communication Standard

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200

Label Elements

None required.

Hazards not otherwise classified (HNOC)

None identified.

3. COMPOSITION / INFORMATION ON INGREDIENT

Ingredients	C.A.S.No.	% by Wt
DI H_2O	7732-18-5	91.29
L-Arginine	74-79-3	8.71

4. FIRST AID MEASURES

EYE CONTACT

Immediately flush with large amounts of water.

SKIN CONTACT

Immediately flush with large amounts of water.

IF SWALLOWED

Immediately give the victim a glass of water.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable Extinguishing Media No information available.

Flash Point No information available.

Method - No information available.

Autoignition Temperature No information available.

Explosion Limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO2).

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health 1 Flammability 1 Instability 0 Physical hazards N/A

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

Environmental Precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up

Clean up the spill carefully and place in container suitable for disposal.

7. HANDLING AND STORAGE

HANDLING:

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

STORAGE: Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PPE

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies.

Engineering Measures None under normal use conditions.

Personal Protective Equipment

Eye/face Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection

No protective equipment is needed under normal use conditions.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

No odor colorless to light yellow water solution. Stable at room temperature.

Physical State	Liquid
Appearance	Colorless to light yellow
Odor	Odorless
Odor Threshold	No information available.
pH	No information available.
Melting Point/Range	No information available.
Boiling Point/Range	No information available.
Flash Point	No information available.
Evaporation Rate	Not applicable.
Flammability or explosive limits	
Upper	No data available.
Lower	No data available.
Vapor Pressure	No information available.
Vapor Density	Not applicable.
Specific Gravity	No information available.
Solubility	Soluble in water.
Autoignition Temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	Not applicable.
Molecular Formula	No information available.
Molecular Weight	No information available.

10. STABILITY AND REACTIVITY

Reactive Hazard None known, based on information available

Stability Stable under normal conditions.

Conditions to Avoid None known, based on information available.

Incompatible Materials None known, based on information available.

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2).

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: No data available.

Inhalation: No data available.

Dermal: No data available.

Skin corrosion/irritation: No data available.

Serious eye damage/eye irritation: No data available.

Respiratory or skin sensitization: No data available.

Germ cell mutagenicity: No data available.

Carcinogenicity IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity: No data available.
Specific target organ toxicity - single exposure: No data available.
Specific target organ toxicity - repeated exposure: No data available.
Aspiration hazard: No data available.
Additional Information RTECS: Not available.

12. ECOLOGICAL INFORMATION

Toxicity No data available
Persistence and degradability No data available.
Bioaccumulative potential No data available.
Mobility in soil No data available.
Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effects No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. TRANSPORT INFORMATION

Not regulated per U.S. DOT, IATA, or IMO.

15. REGULATORY INFORMATION

UNITED STATES REGULATORY INFORMATION
SARA LISTED: No.
CANADA REGULATORY INFORMATION
WHMIS Classification: Not applicable.

The proprietary ingredient is below OSHA or WHMIS 1.0% (w/w) hazardous chemicals criteria that required for reporting.

16. OTHER INFORMATION

DISCLAIMER

For R&D use only. Not for drug, household or other uses.

WARRANTY

This information is based on our present knowledge, and is believed to be correct. It shall be used only as a guide, but shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. Advanced Electrophoresis Solutions Ltd., shall not be held liable for any damage resulting from handling or from contact with the above product.