Advanced Electrophoresis Solutions Ltd.

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Identifier

Product Name: **pI Marker 4.5**
Part Number: **100240**

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified Use	Research use only
Uses Advised Against	Not for human or animal therapeutic or diagnostic purposes, not for consumer use.

1.3. Details of the supplier of the SDS

Supplier/Manufacturer Information:

Manufacturer:	Advanced Electrophoresis Solutions Ltd.
Address:	380 Jamieson Parkway, Cambridge, ON N3C 4N4, Canada
Email:	support@aeslifesciences.com
Business Phone:	+1 (519) 653-6888

EU Distributor Information:

Distributor:	Isogen Lifescience B.V.
Address:	Veldzigt 2A, 3454 PW Utrecht, Netherlands
Email:	support@isogen-lifescience.com
Business Phone:	+31 30 6880771

1.4. Emergency Telephone Number:

Emergency Phone#	This product is not classified as hazardous and does not require an emergency phone number.

This Safety Data Sheet is provided in English for research use only, in accordance with REACH Regulation (EC) No 1907/2006, Annex II.

2. HAZARDS IDENTIFICATION

Classification

Classification according to Regulation (EC) No 1272/2008 (CLP): Not classified.

GHS Label Elements

No pictogram, signal word, or hazard statements required.

Other Hazard

None identified.

3. COMPOSITION / INFORMATION ON INGREDIENT

Ingredients	C.A.S.No.	% by Wt
DI H_2O	7732-18-5	99.1-99.9
Proprietary pI	NA	0.1-0.9

No hazardous components or substances with EU occupational exposure limits are present above the disclosure threshold.

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 (NFPA ratings provided for reference only)
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

8.1. Exposure Guidelines

This product does not contain any substances with occupational exposure limit values established by EU, US, or Canadian regulatory agencies.
No EU Occupational Exposure Limits (OELs), Derived No-Effect Levels (DNELs), or Predicted No-Effect Concentrations (PNECs) have been established for the components of this mixture.

8.2. Exposure Controls

Engineering Controls

General laboratory ventilation is sufficient.

Personal Protective Equipment

Eye/face Protection

Wear chemical safety goggles compliant with European Standard EN166.

Skin and body protection

Wear suitable protective gloves and laboratory coat (EN 374 recommended).

Respiratory Protection

No protective equipment is needed under normal use conditions.

Hygiene Measures

Handle in accordance with good laboratory and industrial hygiene practices. Wash hands after use.

Environmental exposure controls

Avoid release to the environment. Dispose of contents and containers in accordance with local, regional, and national regulations.

9. Physical and chemical properties

Colorless to light yellow aqueous solution, odorless. 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 (CO_2).
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 present at ≥0.1% is classified as a 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

ADR/RID: Not regulated.
IMDG / IATA: Not regulated.

15. REGULATORY INFORMATION

EU REGULATORY INFORMATION
Regulation (EC) No 1272/2008 (CL P): Not classified as hazardous.
Regulation (EC) No 1907/2006 (REACH) Annex XIV (Authorization): Not applicable.
Regulation (EC) No 1907/2006 (REACH) Annex XVII (Restriction): Not applicable.
Substances of Very High Concern (SVHC): Not listed.
EU Occupational Exposure Limits (OELs): Not established.
Chemical Safety Assessment: Not required for this mixture.

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.