



Advanced Electrophoresis Solutions Ltd.

## MATERIAL SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: **0.5% Methyl Cellulose Solution**  
Part Number: **101005**  
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 <sub>2</sub> O | 7732-18-5 | 99.5    |
| Methyl Cellulose    | 9004-67-5 | 0.5     |

### 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 (CO<sub>2</sub>), 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 (CO<sub>2</sub>).

#### **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.

Version 1.3

Issue Date: 2012-04-27

Revision Date: 2025-11-03

---

## 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.

|                       |                           |
|-----------------------|---------------------------|
| <b>Physical State</b> | Liquid                    |
| <b>Appearance</b>     | Colorless to light yellow |
| <b>Odor</b>           | Odorless                  |
| <b>Odor Threshold</b> | No information available. |
| <b>pH</b>             | No information available. |

---

---

|                                         |                           |
|-----------------------------------------|---------------------------|
| <b>Melting Point/Range</b>              | No information available. |
| <b>Boiling Point/Range</b>              | No information available. |
| <b>Flash Point</b>                      | No information available. |
| <b>Evaporation Rate</b>                 | Not applicable.           |
| <b>Flammability or explosive limits</b> |                           |
| <b>Upper</b>                            | No data available.        |
| <b>Lower</b>                            | No data available.        |
| <b>Vapor Pressure</b>                   | No information available. |
| <b>Vapor Density</b>                    | Not applicable.           |
| <b>Specific Gravity</b>                 | No information available. |
| <b>Solubility</b>                       | Soluble in water.         |
| <b>Autoignition Temperature</b>         | No information available. |
| <b>Decomposition Temperature</b>        | No information available. |
| <b>Viscosity</b>                        | Not applicable.           |
| <b>Molecular Formula</b>                | No information available. |
| <b>Molecular Weight</b>                 | 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<sub>2</sub>).

**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.

---

Version 1.3  
Issue Date: 2012-04-27  
Revision Date: 2025-11-03

---

**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.

---