

# Material Safety Data Sheet (MSDS)

## Section 1: Identification of the Substance and of the Company / Undertaking

**Product Name:** Aco-490™ Membrane Labelling Dye  
**Catalogue Number:** Aco-490 (25T) / Aco-490 (100T)  
**Unit Size:** 1 Vial – 25 Tests / 100 Tests  
**Manufacturer:** Acoerela Pte. Ltd., Level 8 S9 Wet Science Building, National University of Singapore, 4 Science Drive 2, Singapore 117544

**24-hour Emergency Response for Hazardous Materials [or Dangerous Goods] Incident. Spill, Leak, Fire, Exposure, or Accident. Call 911.**

*For use as laboratory reagent in research only. Not for food, drug, household, or cosmetic use.*

## Section 2: Hazard Identification

**Singapore SDS Statement:** Not classified as a hazardous substance in accordance with the SINGAPORE STANDARDS for the specification for hazard communication for hazardous chemicals and dangerous goods.

### GHS - Classification

#### **Health Hazards**

Not classified

#### **Physical Hazards**

Not classified

#### **Environmental Hazards**

Not classified

### Label Elements

#### **Signal Word**

None

#### **Hazard Pictograms**

None

#### **Hazard Statements**

Not applicable

## **Precautionary Statements**

### **Prevention**

Not applicable

### **Response**

Not applicable

### **Storage**

Not applicable

### **Disposable**

Not applicable

## **Other Hazards**

Not applicable

## **Section 3: Composition / Information on Ingredients**

The product contains no substances which are considered hazardous to health at their given concentration. Handling all chemicals with caution is still recommended.

## **Section 4: First Aid Measures**

### **Description of First Aid Measures:**

|                     |                                                                                                                  |
|---------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Skin Contact</b> | Rinse under running water for several minutes. Immediate medical attention is not required.                      |
| <b>Eye Contact</b>  | Rinse eyes with water for several minutes. Remove contact lenses if possible.                                    |
| <b>Ingestion</b>    | Not expected to be a significant ingestion hazard under expected conditions of normal use and the given amounts. |
| <b>Inhalation</b>   | Not expected to be an inhalation hazard under expected conditions of normal use of this material.                |

### **General advice:**

Consult a doctor if necessary.

### **Most important symptoms and effects, both acute and delayed:**

Not applicable.

### **Indication of any immediate medical attention and special treatment needed:**

None.

## **Section 5: Firefighting Measures**

### **Suitable extinguishing media:**

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

**Unsuitable extinguishing media:**

No information available.

**Special hazards arising from the substance or mixture:**

No information available.

**Advice for firefighters:**

Standard procedure for chemical fires.

**Special protective equipment for firefighters:**

No information available.

## Section 6: Accidental Release Measures

**Personal precautions:**

Always use personal protective equipment (PPE). Ensure adequate ventilation. Avoid breathing vapours, mist or gas. Remove all sources of ignition.

**Environmental precautions:**

Prevent leakage or spillage as much as possible. Avoid discharging the product into drains and sinks if possible.

**Methods and materials for containment and cleaning up:**

Handle spillage using chemical spill kits. Contain materials in an appropriate closed container for disposal.

## Section 7: Handling and Storage

**Precautions for safe handling:**

Always use personal protective equipment (PPE) to avoid direct contact with skin. No special handling precautions are necessary.

**Conditions for safe storage, including any incompatibilities:**

Store at 2 to 8°C in sterile conditions and protected from light. Store in properly labelled containers.

**Specific end use(s):**

For research use only.

## Section 8: Exposure Controls / Personal Protection

### Control Parameters

**Exposure Limits**

No information available.

**Engineering Measures**

Work in areas of adequate ventilation. Always wear personal protective equipment (PPE).

## **Exposure Controls**

|                                        |                                                                                                                       |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Respiratory Protection</b>          | If necessary, wear respirators and components tested and approved under appropriate government standards              |
| <b>Hand Protection</b>                 | Wear compatible and approved chemical-resistant gloves.                                                               |
| <b>Eye Protection</b>                  | Wear safety goggles approved by government standards.                                                                 |
| <b>Skin and Body Protection</b>        | Wear appropriate protective clothing.                                                                                 |
| <b>Hygiene Measures</b>                | Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly after chemical handling. |
| <b>Environmental Exposure Controls</b> | Avoid discharge into drains and sinks whenever possible.                                                              |

## **Section 9: Physical and Chemical Properties**

|                                      |                                                              |
|--------------------------------------|--------------------------------------------------------------|
| <b>Appearance</b>                    | Yellow solid coating walls of the tube                       |
| <b>Odour</b>                         | No data available                                            |
| <b>pH</b>                            | No data available                                            |
| <b>Melting Point / Melting Range</b> | Not tested                                                   |
| <b>Boiling Point / Boiling Range</b> | Not tested                                                   |
| <b>Flash Point</b>                   | Not tested                                                   |
| <b>Autoignition Temperature</b>      | Not tested                                                   |
| <b>Decomposition Temperature</b>     | Not tested                                                   |
| <b>Flammability (Solid / Gas)</b>    | No data available                                            |
| <b>Upper Explosion Limit</b>         | No data available                                            |
| <b>Lower Explosion Limit</b>         | No data available                                            |
| <b>Vapour Pressure</b>               | No data available                                            |
| <b>Relative Density</b>              | No data available                                            |
| <b>Specific Gravity</b>              | No data available                                            |
| <b>Solubility</b>                    | > 2 mg/mL in water. Poor solubility in ethanol (< 0.1 mg/mL) |
| <b>Explosive Properties</b>          | No data available                                            |

### **Other information:**

No information available.

## **Section 10: Stability and Reactivity**

|                                           |                                                                    |
|-------------------------------------------|--------------------------------------------------------------------|
| <b>Chemical Stability</b>                 | Stable for at least 6 months under recommended storage conditions. |
| <b>Possibility of Hazardous Reactions</b> | No data available.                                                 |
| <b>Conditions to Avoid</b>                | No data available.                                                 |
| <b>Materials to Avoid</b>                 | No data available.                                                 |
| <b>Hazardous Decomposition Products</b>   | No data available.                                                 |

## Section 11: Toxicology

To the best of our knowledge, the chemical, physical, biological, and toxicological properties of this product have not been thoroughly investigated.

### Acute Toxicity

|                                   |                   |
|-----------------------------------|-------------------|
| <b>Oral LD<sub>50</sub></b>       | No data available |
| <b>Inhalation LC<sub>50</sub></b> | No data available |
| <b>Dermal LD<sub>50</sub></b>     | No data available |

### Other Information on Toxicity

|                                                           |                   |
|-----------------------------------------------------------|-------------------|
| <b>Skin Irritation / Corrosion</b>                        | No data available |
| <b>Serious Eye Damage / Irritation</b>                    | No data available |
| <b>Reproductive Toxicity</b>                              | No data available |
| <b>Sensitisation</b>                                      | No data available |
| <b>Aspiration Hazard</b>                                  | No data available |
| <b>Carcinogenicity</b>                                    | No data available |
| <b>Specific Target Organ Toxicity – Single Exposure</b>   | No data available |
| <b>Specific Target Organ Toxicity – Repeated Exposure</b> | No data available |

## Section 12: Ecological Information

The environmental impact of this product has not been fully investigated.

|                                           |                   |
|-------------------------------------------|-------------------|
| <b>Persistence and Degradability</b>      | No data available |
| <b>Potential for Bioaccumulation</b>      | No data available |
| <b>Mobility in Soil</b>                   | No data available |
| <b>Results of PBT and vPvB Assessment</b> | No data available |
| <b>Other Adverse Effects</b>              | No data available |

## Section 13: Disposal Considerations

This product, its chemical, solutions, or any by-products and its container must be disposed of in accordance with the approved disposal guidelines by the local, regional or national/federal regulation.

## Section 14: Transport Information

### IATA / ADR / DOT-US / IMDG

Not classified as dangerous in the meaning of transport regulations.

|                                   |                |
|-----------------------------------|----------------|
| <b>UN Number</b>                  | Not applicable |
| <b>UN Proper Shipping Name</b>    | Not applicable |
| <b>Transport Hazard Class(es)</b> | Not applicable |
| <b>Packing Group</b>              | Not applicable |

**Environmental Hazards**

Not applicable.

**Special Precautions for User**

Not applicable.

**Transport in bulk according to Annex II of MARPOL and the IBC Code**

Not applicable.

**Section 15: Regulatory Information**

**Singapore** No information available.

**International** No information available.

**Section 16: Other Information**

|                            |                            |
|----------------------------|----------------------------|
| <b>Creation Date</b>       | 20-June-2024               |
| <b>Prepared By</b>         | Acoerela Pte. Ltd.         |
| <b>Version Number</b>      | 1                          |
| <b>Revision Number</b>     | 2                          |
| <b>Reason for Revision</b> | Updated storage conditions |

For use in research only. Not for use in diagnostic procedures.

The above information and recommendation were presented to the best of our knowledge, through thorough search and/or investigation based on prudent and professional judgement. The information is not exhaustive nor is purported to be all inclusive, and is to be used only as a guide. Handling of all materials and mixtures with unknown hazards should be dealt with caution. The Manufacturer does not have perfect knowledge on experimental conditions during actual usage and hence shall not be held liable for any damages or losses resulting from the handling or from contact with the product described herein. The information in this SDS also does not constitute a warranty of merchantability for any particular purpose.

**End of Material Safety Data Sheet**