

Material Safety Data Sheet (MSDS)

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

Product Name: AcoRL-490™ Reference Liposome
Catalogue Number: AcoRL-490
Unit Size: 1 Vial
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 the local emergency number.

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:

- Skin Contact** Rinse under running water for several minutes. Immediate medical attention is not required.
- Eye Contact** Rinse eyes with water for several minutes. Remove contact lenses if possible.
- Ingestion** Not expected to be a significant ingestion hazard under expected conditions of normal use and the given amounts.
- Inhalation** 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 room temperature if unopened, or 2 to 8°C post-reconstitution. Store in properly labelled containers and protect from light.

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

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

Section 9: Physical and Chemical Properties

Appearance	Yellow solid at bottom of the tube
Odour	No data available
pH	No data available
Melting Point / Melting Range	Not tested
Boiling Point / Boiling Range	Not tested
Flash Point	Not tested
Autoignition Temperature	Not tested
Decomposition Temperature	Not tested
Flammability (Solid / Gas)	No data available
Upper Explosion Limit	No data available
Lower Explosion Limit	No data available
Vapour Pressure	No data available
Relative Density	No data available
Specific Gravity	No data available
Solubility	No data available
Explosive Properties	No data available

Other information:

No information available.

Section 10: Stability and Reactivity

Chemical Stability	Stable for at least 6 months under recommended storage conditions
Possibility of Hazardous Reactions	No data available
Conditions to Avoid	No data available
Materials to Avoid	No data available
Hazardous Decomposition Products	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

Oral LD₅₀	No data available
Inhalation LC₅₀	No data available
Dermal LD₅₀	No data available

Other Information on Toxicity

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

Section 12: Ecological Information

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

Persistence and Degradability	No data available
Potential for Bioaccumulation	No data available
Mobility in Soil	No data available
Results of PBT and vPvB Assessment	No data available
Other Adverse Effects	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.

UN Number	Not applicable
UN Proper Shipping Name	Not applicable
Transport Hazard Class(es)	Not applicable
Packing Group	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

- Creation Date** 18-May-2026
- Prepared By** Acoerela Pte. Ltd.
- Version Number** 1
- Revision Number** 2
- Reason for Revision** Updated conditions for safe storage under Section 7.

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