

LEADING LIFE TECHNOLOGIES

GENERAL SAFETY DATA SHEET

OptiVibro® MSC Serum-free Medium MH01

Document number	SDS-MH01-GEN-001
Version	1.0
Preparation date	August 20, 2026
Product form	Liquid basal medium plus frozen supplement
Intended audience	Laboratory, cell-culture, and manufacturing users

IMPORTANT - GENERAL TEMPLATE

This general SDS content model is adapted from the supplied Leading Life Technologies FBS SDS and the supplied MH01 material safety data sheet. It is not a manufacturer-issued, lot-specific regulatory determination. Leading Life Technologies must validate the final formulation, packaging, lot, jurisdiction, supplier information, and applicable requirements before release or operational use.

For laboratory research, cell culture, diagnostic reagent manufacturing, or further manufacturing only, as permitted by the product label. Not for diagnostic or therapeutic use. Not for direct administration to humans or animals, food, drug, or household use unless specifically approved and labeled.

SECTION 1 - IDENTIFICATION

Product identifier	OptiVibro® MSC Serum-free Medium MH01
Other means of identification	MSC Serum-free Basal Medium MH01 and MSC Serum-free Medium Supplement MH01
Product / catalog no.	MH000-N011 (500 mL kit); confirm all applicable catalog numbers before final issue.
Recommended use	Isolation and expansion of human mesenchymal stem cells (hMSCs); laboratory research and manufacturing use as permitted by the product label.
Restrictions on use	Not intended for diagnostic or therapeutic use. Do not use contrary to the product label or site biosafety procedures.
Responsible party	Leading Life Technologies
Emergency telephone	650-996-6078

SECTION 2 - HAZARD(S) IDENTIFICATION

GHS / OSHA classification	Not classified as hazardous under the OSHA Hazard Communication Standard based on the supplied MH01 SDS information. A final product-specific hazard determination is required.
Signal word	None required.
Hazard pictograms	None required.
Hazard statements	None required for the non-hazardous classification.
Other hazards	Avoid eye and skin contact. Avoid generating aerosols. Frozen supplement and dry ice shipments present separate cold-burn and ventilation hazards.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

The MH01 system is supplied as a basal medium and a supplement. The supplied MH01 SDS states that the product does not contain health-hazardous substances at the given concentration. Exact composition is proprietary; final product labeling and lot documentation control.

Component	MSC Serum-free Basal Medium MH01; aqueous culture-medium formulation.
Supplement	MSC Serum-free Medium Supplement MH01; frozen liquid supplement.
Identifiers	Product kit: MH000-N011. Component catalog numbers should be confirmed on the label.
Hazardous ingredients	No hazardous ingredient identified for disclosure in the supplied general MH01 SDS.

SECTION 4 - FIRST-AID MEASURES

Eye contact	Rinse cautiously with clean water for at least 15 minutes. Remove contact lenses if present and easy to do. Obtain medical advice if irritation persists.
Skin contact	Remove contaminated clothing. Wash thoroughly with soap and water. Seek medical advice for persistent irritation.
Inhalation	Move to fresh air. Obtain medical attention for persistent respiratory symptoms.
Ingestion	Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical advice if symptoms occur or a significant amount was swallowed.
Most important symptoms	No specific acute or delayed effects are expected under normal use; temporary eye or skin irritation may occur after contact.
Medical attention	Treat symptomatically. Provide the product label, SDS, and exposure details to medical personnel.

SECTION 5 - FIRE-FIGHTING MEASURES

Suitable extinguishing media	Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide as appropriate for the surrounding fire.
Specific hazards	Aqueous medium is not expected to be readily flammable. Heating to decomposition may produce irritating smoke and oxides of carbon, nitrogen, or other formulation-dependent products.
Protective equipment	Firefighters should wear self-contained breathing apparatus and full protective clothing when conditions warrant. Prevent contaminated runoff from entering drains where practicable.
Dry ice shipments	Dry ice sublimates to carbon dioxide gas. Ventilate enclosed areas and never place dry ice in a sealed, unvented container.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal precautions. Restrict access. Wear gloves, protective clothing, and eye protection. Avoid splashes and aerosol generation. Ventilate the area if aerosols could have formed. For frozen supplement spills, avoid direct skin contact.

Containment and cleanup. Prevent further leakage where safe. Absorb with inert material, disposable towels, or compatible absorbent and place in a closed, labeled container for disposal. Clean the affected surface thoroughly using a validated facility procedure. Do not mix disinfectants. Prevent uncontrolled release to drains, soil, or surface water.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling. Use trained personnel and good laboratory practices. Avoid contact with eyes, skin, and clothing. Avoid inhaling mist or aerosol. Keep containers closed when not in use. Do not eat, drink, smoke, apply cosmetics, or mouth-pipette in handling areas.

Storage. Store basal medium at 2-8°C protected from light. Store supplement at -20°C protected from light. Avoid direct sunlight, UV exposure, excessive heat, and repeated freeze-thaw cycles. After preparation, store complete medium at 2-8°C protected from light and use within 2 weeks.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational limits	No occupational exposure limits are established for the supplied product information.
Engineering controls	General laboratory ventilation is normally adequate. Use suitable containment or local exhaust where procedures may generate aerosols. Provide access to eyewash and safety shower.
Eye / face protection	Safety glasses with side shields. Use splash goggles or a face shield when splash risk is significant.
Skin protection	Disposable laboratory gloves such as nitrile and a lab coat or protective gown. Change contaminated gloves and clothing promptly.
Respiratory protection	Not normally required for routine handling. If aerosols cannot be controlled, use a site-specific respiratory protection program consistent with applicable regulations.
Hygiene measures	Wash hands after handling and before leaving the work area. Clean equipment and work areas according to facility procedure.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid; basal medium is supplied chilled and supplement is supplied frozen.
Color / odor	No product-specific general specification provided; inspect the product before use.
pH	6.90-7.60 (supplied MH01 SDS).
Flash point / flammability	No data available; aqueous medium is not expected to be readily flammable.
Water solubility	No product-specific data available.
Other properties	Boiling point, vapor pressure, density, viscosity, explosive, oxidizing, and partition properties: no data available for the mixture.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	No dangerous reaction expected under normal laboratory conditions.
Chemical stability	Stable when stored and handled according to product-specific instructions.
Hazardous reactions	Hazardous polymerization is not expected.
Conditions to avoid	Light, high temperature, contamination, repeated freeze-thaw cycles, and aerosol-generating conditions.
Incompatible materials	Strong oxidizing agents, strong acids, and strong alkalis.
Hazardous decomposition products	No hazardous decomposition expected under conventional conditions. See Section 5 for decomposition hazards during fire or severe heating.

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely routes of exposure	Eye contact, skin contact, ingestion, or inhalation of aerosols.
Acute toxicity	No adequate product-specific numerical data are available. No major hazards are expected under correct handling based on supplied information.
Skin / eye irritation	No known hazard under normal conditions in the supplied MH01 SDS. Contact may cause temporary irritation.
Sensitization	Unknown; no product-specific data available.
Carcinogenicity, mutagenicity, reproductive toxicity, STOT	No data available for the mixture; the supplied MH01 SDS reports no known carcinogen.
Aspiration hazard / symptoms	No data available. Possible redness, tearing, skin irritation, or respiratory discomfort following aerosol exposure.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	No product-specific aquatic or terrestrial toxicity data are available.
Persistence / degradability	No data available.
Bioaccumulative potential	No data available.
Mobility in soil	No data available.
PBT / vPvB assessment	Not available; a chemical safety assessment is not required for the supplied information.
Other adverse effects	Avoid uncontrolled environmental release.

SECTION 13 - DISPOSAL CONSIDERATIONS

Do not discharge unused product or concentrated spill residues to sinks, drains, soil, or surface water unless specifically permitted. Dispose of unused product, absorbents, contaminated disposables, and packaging in accordance with federal, state, local, and institutional requirements. Waste classification depends on use and potential contamination with cells, microorganisms, recombinant material, hazardous chemicals, pharmaceuticals, or radioisotopes.

SECTION 14 - TRANSPORT INFORMATION

U.S. DOT / IMDG / IATA	Not expected to be regulated as dangerous goods in its generic form, based on the supplied MH01 SDS. Confirm the final transport classification for the shipped configuration.
UN number / shipping name / class / packing group	Not applicable to the generic product; confirm shipment-specific requirements.
Environmental hazard / marine pollutant	Not expected based on supplied information.
Special precautions	Protect from damage, light exposure, and temperature excursion. Maintain prescribed storage temperature during transport.
Dry ice	When supplement is shipped on dry ice, dry ice is a separate dangerous good (UN 1845, Class 9) and must be packaged, marked, labeled, documented, and vented as required.

SECTION 15 - REGULATORY INFORMATION

OSHA Hazard Communication	Not classified as hazardous based on the supplied MH01 SDS. The responsible party must document the product-specific hazard determination.
Chemical inventories	No data available for TSCA, EINECS/ELINCS, AICS, or China inventory status in the supplied information.
State / local requirements	Assess applicable workplace, right-to-know, waste, and environmental requirements for the intended location and use.

SECTION 16 - OTHER INFORMATION

This general safety data sheet is based on the supplied template and source documents and is intended as a guide. It does not constitute an express or implied warranty, including merchantability or fitness for a particular purpose. All materials and mixtures may have unknown hazards and should be handled with appropriate caution. Leading Life Technologies must validate the final product formulation, classification, labeling, and all jurisdictional requirements before release.

Revision history: Rev. 1.0 - Initial general SDS for OptiVibro® MSC Serum-free Medium MH01.