

LEADING LIFE TECHNOLOGIES

GENERAL SAFETY DATA SHEET

OptiVitro® 293 Serum-Free Feed Medium HA02 and HA03

Document number	SDS-HA02-HA03-GEN-001
Version	1.0
Preparation date	August 19, 2026
Product form	Liquid and powder formats
Intended audience	Laboratory and manufacturing users

IMPORTANT - GENERAL TEMPLATE

This document is a general SDS content model based on the supplied CE01 general SDS and the supplied HA02/HA03 series MSDS. It is not a manufacturer-issued, lot-specific regulatory determination. Leading Life Technologies must validate the complete formulation, product formats, catalog numbers, labels, responsible-party address, emergency contact, and jurisdictional requirements before release or operational use.

For research, process development, cell-culture production, or further manufacturing use only. Not for direct administration to humans or animals. Not for food, drug, household, or therapeutic use unless specifically approved and labeled.

SECTION 1 - IDENTIFICATION

Product identifier	OptiVibro® 293 Serum-Free Feed Medium HA02 and OptiVibro® 293 Serum-Free Feed Medium HA03
Other means of identification	HA02 / HA03; 293 serum-free feed medium; liquid or powder format
Product / catalog no.	HA02 liquid: HA000-N011, HA000-N012; powder: HA000-N021, HA000-N022. HA03 liquid: HA000-N031, HA000-N032; powder: HA000-N041, HA000-N042. Confirm final catalog numbers and formats before issue.
Recommended use	Cell-culture feed medium for compatible HEK 293 cell culture, laboratory research, process development, and further manufacturing as permitted by the product label.
Restrictions on use	Not for direct human or animal administration; not for food or household use.
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 currently available information for this general product description. Product-specific assessment is required.
Signal word	None required.
Hazard pictograms	None required.
Hazard statements	None required for a non-hazardous classification.
Other hazards	Powder may generate nuisance dust during transfer or reconstitution. Direct eye contact may cause temporary irritation. Frozen product or dry ice used in shipping presents separate cold-burn, pressure, and carbon dioxide asphyxiation hazards.

Avoid contact with eyes and prolonged skin contact. Use standard laboratory practices and minimize aerosol or dust generation.

SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Proprietary serum-free cell-culture feed media. The products are aqueous nutrient mixtures (liquid) or dry nutrient mixtures (powder) containing, as applicable, amino acids, vitamins, inorganic salts, carbohydrates, buffers, and other cell-culture nutrient components. No ingredient is identified in this general template at a concentration requiring hazardous-ingredient disclosure under applicable U.S. OSHA HazCom requirements. The exact composition is proprietary and must be reviewed by Leading Life Technologies before final issue.

Hazardous ingredients	No hazardous ingredient identified for disclosure in this general template.
CAS numbers	Not assigned / not applicable to the proprietary mixtures.
Additives	Confirm whether any antibiotics, antimycotics, preservatives, growth factors, or other additives are present; such additions may alter classification.

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. Continue rinsing. Obtain medical advice if irritation persists.
Skin contact	Remove contaminated clothing. Wash skin thoroughly with soap and water. Seek medical advice for persistent irritation or rash.
Inhalation	Move to fresh air. If dust or aerosol exposure causes breathing difficulty or persistent symptoms, obtain medical attention.
Ingestion	Rinse mouth with water. Do not induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Seek medical advice if symptoms occur or a significant amount was swallowed.
Most important symptoms	Possible temporary eye, skin, or respiratory irritation, particularly from powder dust or aerosols.
Medical attention	Treat symptomatically. Provide medical personnel with the product label and SDS.

SECTION 5 - FIRE-FIGHTING MEASURES

Suitable extinguishing media	Use water spray, foam, dry chemical, or carbon dioxide as appropriate for the surrounding fire.
Unsuitable media	No product-specific restriction known. Avoid high-pressure streams if they could spread contaminated material.
Specific hazards	The product is not expected to be readily flammable. Heating to decomposition may produce irritating smoke and carbon oxides, nitrogen oxides, and other decomposition products.
Protective equipment	Firefighters should wear self-contained breathing apparatus and full protective clothing when conditions warrant.
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, dust formation, and aerosol generation.
- Ventilate the area if powders, mists, or aerosols may have formed. For frozen spills, avoid direct skin contact.

Containment and cleanup

- Absorb liquid with inert material such as disposable towels or compatible absorbent. For powder, collect carefully without generating dust. Place waste in a closed, labeled container.
- Clean the affected surface using water and a facility-approved cleaning or disinfection procedure. Do not mix disinfectants.
- Prevent uncontrolled release to drains, soil, or surface water. Report large releases as required by institutional and local procedures.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling

- Use trained laboratory personnel and standard microbiological and chemical hygiene practices. Do not mouth-pipette. Avoid eating, drinking, smoking, or applying cosmetics in handling areas.
- Minimize dust and aerosol generation. Keep containers closed when not in use, label secondary containers, and maintain lot traceability.

Conditions for safe storage

- Follow the product label and certificate of analysis. Store at 2-8°C and protect from light.
- For powder, store dark, dry, tightly closed, and protected from moisture. For liquid, protect from contamination and excessive heat.
- Transport protected from light: HA02 liquid/powder below 10°C; HA03 liquid/powder below 10°C. Confirm current product-label requirements before shipment.
- Segregate from food and incompatible chemicals. If shipped with dry ice, unpack and store in a well-ventilated area.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits	No OSHA PEL, ACGIH TLV, or other product-specific occupational exposure limit is established for these general mixtures.
Engineering controls	General laboratory ventilation is normally adequate. Use containment or local exhaust for procedures that could generate powder dust, aerosols, or splashes. Provide access to eyewash and safety shower facilities.
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.
Respiratory protection	Not normally required for routine closed handling. If dust or aerosols cannot be controlled, use a site-specific respiratory protection program compliant with applicable regulations.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Liquid (liquid format); powder (powder format)
Appearance / color	Clear to slightly opalescent liquid, or white to off-white powder; verify lot-specific product specification.
Odor	No data available / characteristic mild odor.
pH	HA02: approximately 6.5-7.9 after preparation; HA03: approximately 7.0-8.9 after preparation. Verify final product format and lot-specific specification.
Water solubility	Expected to be soluble or dispersible in water when handled according to product instructions.
Flash point / flammability	Not expected to be flammable; no product-specific data available.
Other properties	Boiling point, vapor pressure, density, viscosity, explosive/oxidizing properties: no data available for proprietary mixtures.

SECTION 10 - STABILITY AND REACTIVITY

Reactivity	No dangerous reaction is expected under normal laboratory conditions.
Chemical stability	Stable when stored and handled according to product-specific instructions. Product performance may deteriorate with contamination, moisture exposure, excessive heat, or temperature excursion.
Possibility of hazardous reactions	Hazardous polymerization is not expected.
Conditions to avoid	Excessive heat, moisture exposure (powder), contamination, improper reconstitution, and conditions that generate dust or aerosols.
Incompatible materials	Strong oxidizing agents and highly reactive chemicals. Assess compatibility with disinfectants or co-handled reagents.
Hazardous decomposition products	On combustion or severe heating: carbon oxides, nitrogen oxides, smoke, and other irritating decomposition products.

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely routes of exposure	Eye contact, skin contact, ingestion, or inhalation of powder dust or aerosols.
Acute toxicity	No adequate numerical data available for the mixtures. Not expected to present acute systemic toxicity during normal laboratory handling.
Skin corrosion / irritation	Prolonged or repeated contact may cause mild irritation; no product-specific test data available.
Serious eye damage / irritation	Direct contact may cause temporary irritation; no product-specific test data available.
Respiratory or skin sensitization	No data available. Avoid repeated dust or aerosol exposure.
Mutagenicity, carcinogenicity, reproductive toxicity, STOT, aspiration hazard	No data available for the proprietary mixtures. Confirm formulation-specific regulatory status before official issue.

SECTION 12 - ECOLOGICAL INFORMATION

Ecotoxicity	No product-specific data available.
Persistence and degradability	No product-specific data available.
Bioaccumulative potential	No product-specific data available.
Mobility in soil	No product-specific data available.
Other adverse effects	Prevent uncontrolled release. Dispose of according to facility and local requirements.

SECTION 13 - DISPOSAL CONSIDERATIONS

Dispose of unused product, residues, and contaminated packaging in accordance with applicable federal, state, local, and institutional requirements. Determine waste classification based on the actual product, contaminants, and process use. Do not discharge to drains unless specifically permitted. For biological contamination, decontaminate according to validated site procedures before disposal.

SECTION 14 - TRANSPORT INFORMATION

UN number	Not assigned for the product as described in this general SDS.
UN proper shipping name / hazard class / packing group	Not regulated as dangerous goods by ADR/RID, IMDG, or IATA for the product as described. Confirm final classification, route, and packaging before shipment.
Environmental hazards	Not expected to be a marine pollutant based on this general product description.
Special precautions	Protect from damage, light exposure, and temperature excursion. Confirm the actual package, route, storage requirements, and carrier requirements before shipment.
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 in this general SDS based on currently available information. The responsible party must maintain a product-specific hazard determination.
TSCA / chemical inventories	Not evaluated for proprietary mixtures. Inventory requirements may differ for individual ingredients, additives, and destination jurisdiction.
State / local requirements	Not evaluated. Assess applicable workplace, right-to-know, waste, and environmental requirements.
International requirements	Confirm requirements for the destination country, including chemical inventory, import, labeling, and transport obligations.

SECTION 16 - OTHER INFORMATION

Document number	SDS-HA02-HA03-GEN-001
Version	1.0
Preparation date	August 19, 2026
Revision summary	Initial general SDS prepared for Leading Life Technologies using the supplied CE01 general SDS and supplied HA02/HA03 series MSDS.
Abbreviations	ACGIH: American Conference of Governmental Industrial Hygienists; GHS: Globally Harmonized System; IATA: International Air Transport Association; IMDG: International Maritime Dangerous Goods; OSHA: Occupational Safety and Health Administration; PEL: permissible exposure limit; SDS: safety data sheet; TLV: threshold limit value.

DISCLAIMER

The information in this document is prepared as a general guide and is believed to be accurate based on the supplied reference materials. It does not constitute a product specification, certificate of safety, regulatory determination, or warranty. Leading Life Technologies, as the responsible party, must verify the exact formulation, format, lot-specific information, storage and transport conditions, regulatory status, and contact details before issuing this document as an official SDS. The user is responsible for safe handling and compliance with applicable requirements.