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SAFETY DATA SHEET

GHS / OSHA HazCom 2012 Compliant

Biomod Compounds LLC

CJC-1295

CAS: 863288-34-0
Formula: C152H252N44O42

Document ID: 15e3ebe2
Revision Date: 2026-05-21
Version: 1.0

Section 1 — Product and Company Identification

Product Name	CJC-1295
Synonyms	863288-34-0; CID 56841945; 446036-97-1
CAS Number	863288-34-0
Molecular Formula	C152H252N44O42
IUPAC Name	(3S)-4-[[(2S)-1-[[(2S,3S)-1-[[(2S)-1-[[(2S,3R)-1-[[(2S)-5-amino-1-[[(2S)-1-[[(2S)-1-[[(2S)-6-amino-1-[[(2S)-1-[[(2S)-1-[[(2S)-5-amino-1-[[(2S)-1-[[(2S)-1-[[(2S)-1-[[(2S)-6-amino-1-[[(2S)-1-[[(2S)-1-[[(2S)-5-amino-1-[[(2S)-1-[[(2S,3S)-1-[[(2S)-1-[[(2S)-1-[[(2S)-1-amino-5-carbamimidamido-1-oxopentan-2-yl]amino]-3-hydroxy-1-oxopropan-2-yl]amino]-4-methyl-1-oxopentan-2-yl]amino]-3-methyl-1-oxopentan-2-yl]amino]-3-carboxy-1-oxopropan-2-yl]amino]-1,5-dioxopentan-2-yl]amino]-4-methyl-1-oxopentan-2-yl]amino]-4-methyl-1-oxopentan-2-yl]amino]-1-oxohexan-2-yl]amino]-5-carbamimidamido-1-oxopentan-2-yl]amino]-1-oxopropan-2-yl]amino]-3-hydroxy-1-oxopropan-2-yl]amino]-4-methyl-1-oxopentan-2-yl]amino]-1,5-dioxopentan-2-yl]amino]-1-oxopropan-2-yl]amino]-4-methyl-1-oxopentan-2-yl]amino]-3-methyl-1-oxobutan-2-yl]amino]-1-oxohexan-2-yl]amino]-5-carbamimidamido-1-oxopentan-2-yl]amino]-3-(4-hydroxyphenyl)-1-oxopropan-2-yl]amino]-3-hydroxy-1-oxopropan-2-yl]amino]-1,5-dioxopentan-2-yl]amino]-3-hydroxy-1-oxobutan-2-yl]amino]-1-oxo-3-phenylpropan-2-yl]amino]-3-methyl-1-oxopentan-2-yl]amino]-1-oxopropan-2-yl]amino]-3-[[(2R)-2-[[(2S)-2-amino-3-(4-hydroxyphenyl)propanoyl]amino]propan… [truncated — full value in PDF metadata]
Identified Uses	Research laboratory chemical for in vitro scientific research and development use only.

Restriction on Use	Not for human or veterinary use. Not for food, drug, cosmetic, household, agricultural, clinical, therapeutic, or diagnostic applications.

Manufacturer / Supplier

Company	Biomod Compounds LLC
Address	6625 S Valley View Blvd D418, Las Vegas, Nevada 89118, US
Phone	7024982144
Website	https://www.biomodpeptides.com/
Emergency Contact	CHEMTREC
Emergency Phone	800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/ week

Section 2 — Hazard Identification

Classification of the substance

Not classified based on currently available data; however, data is limited and hazards cannot be fully characterized. The absence of classification should not be interpreted as a determination of the absence of hazard.

Classification has been conducted in accordance with 29 CFR 1910.1200 (OSHA HazCom 2012) and GHS Rev.8 using all available data and scientifically valid weight-of-evidence approaches (GHS Rev.8 Chapter 1.3.2.4), including read-across from chemical class and structural considerations where substance-specific study data is not available.

Signal Word: None

GHS Pictograms:

None required based on classification.

Hazard Statements

None. This substance is not classified for any GHS hazard class based on available data.

Precautionary Statements

- P261: Avoid breathing dust, fume, gas, mist, vapors, or spray.
- P264: Wash hands and exposed skin thoroughly after handling.
- P280: Wear protective gloves, protective clothing, and eye/face protection.
- P501: Dispose of contents and container in accordance with local, regional, national, and international regulations.

Precautionary statements are provided as best practice for handling substances with limited toxicological data, and are not a declaration of GHS classification.

Hazards Not Otherwise Classified (HNOC)

None known based on available data and weight-of-evidence assessment. The toxicological properties of this substance have not been fully characterized; handle as a potentially bioactive substance of unknown toxicity.

Section 3 — Composition / Information on Ingredients

Single-substance product. Chemical identity:

Ingredient

CAS Number	Mol. Formula	Mol. Weight	Concentration	
CJC-1295	863288-34-0	C152H252N44O42	3367.9 g/mol	>98% (research grade)

Impurities

No hazardous impurities known to be present above the GHS classification thresholds specified in 29 CFR 1910.1200 Appendix A. Residual synthesis reagents, solvents, and counter-ions may be present at levels consistent with research-grade (>98% purity) material. Balance: non-hazardous impurities. Refer to the accompanying Certificate of Analysis (CoA) for the lot-specific impurity profile.

Section 4 — First Aid Measures

Eye Contact

Rinse cautiously with water for several minutes. If irritation persists, seek medical advice.

Skin Contact

Wash with soap and water. Remove contaminated clothing and wash before reuse. If irritation persists, seek medical advice.

Inhalation

Move affected person to fresh air. If symptoms develop, seek medical advice.

Ingestion

Rinse mouth thoroughly with water. If large amounts are swallowed or if symptoms develop, seek medical advice. Do not induce vomiting unless directed by medical personnel.

Note to Physician

Treat symptomatically. No specific antidote known.

Section 5 — Fire Fighting Measures

Flash Point: *Not determined*

Suitable Extinguishing Media

Use extinguishing media appropriate to the surrounding fire conditions. Carbon dioxide (CO2), dry chemical powder, foam, or water spray.

Special Hazards

May produce toxic gases upon combustion. Carbon monoxide and other combustion products may be generated.

Protective Equipment for Firefighters

Wear self-contained breathing apparatus (SCBA) and full protective gear. Do not enter fire area without proper protective equipment.

Section 6 — Accidental Release Measures

Personal Precautions

Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Use personal protective equipment as described in Section 8.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Do not allow the product to enter drains, sewers, or waterways.

Containment and Cleanup

Sweep up and shovel. Keep in suitable, closed containers for disposal. Avoid raising dust. Clean contaminated surface thoroughly. Dispose of waste in accordance with local regulations (see Section 13).

Section 7 — Handling and Storage

Handling Precautions

Handle CJC-1295 (CAS 863288-34-0) as a research-use-only peptide of unknown human toxicity, in accordance with the OSHA Laboratory Standard (29 CFR 1910.1450) and general HazCom 2012 requirements (29 CFR 1910.1200). Perform all weighing, opening of vials, and reconstitution in a chemical fume hood, ventilated weighing enclosure, or Class II biological safety cabinet to minimize generation of and exposure to airborne particulates; lyophilized peptide powders are easily aerosolized due to their low bulk density and electrostatic character. Wear appropriate personal protective equipment, including chemical-resistant nitrile gloves, a buttoned laboratory coat, and ANSI Z87.1-compliant safety eyewear (chemical splash goggles when handling solutions). If engineering controls cannot prevent dust generation, use a NIOSH-approved particulate respirator (e.g., N95 or higher) selected per 29 CFR 1910.134. Do not eat, drink, smoke, chew gum, or apply cosmetics in work areas where the substance is handled, consistent with 29 CFR 1910.141 and 1910.1450. Avoid all routes of exposure: skin and eye contact, inhalation of dust or mist, and ingestion. Where information on workplace controls for bioactive pharmaceutical ingredients is needed, consult the NIOSH guidance on managing hazardous drug exposures (CDC/NIOSH 2023-130) and apply containment-based hierarchy-of-controls practices. Wash hands and exposed skin thoroughly with soap and water after handling and before leaving the work area. Decontaminate work surfaces and reusable equipment after use, and segregate contaminated waste for disposal as described in Section 13. Ground and bond containers when transferring dry powder to mitigate static buildup. Keep containers tightly closed when not in use and protect from moisture, since hygroscopic peptide solids readily absorb atmospheric water, promoting hydrolytic degradation.

Storage Conditions

Store the lyophilized solid tightly closed in its original container under an inert, dry atmosphere (argon or nitrogen headspace is preferred for opened containers) and protected from light, moisture, and heat. For long-term storage of the lyophilized powder, general peptide-handling guidance (e.g., NIBSC Peptide Storage guidance; published peptide stability literature) recommends storage at -20 degC or colder in a non-frost-free freezer; short-term storage at 2-8 degC is acceptable for working stocks. Allow sealed containers to equilibrate to room temperature before opening to prevent condensation of atmospheric moisture onto the hygroscopic solid. Reconstituted aqueous solutions are substantially less stable than the lyophilized form; prepare in sterile, low-ionic-strength buffer at slightly acidic pH (approximately pH 5-6, per published peptide-handling guidance) and store frozen in single-use aliquots at -20 degC or colder to avoid repeated freeze-thaw cycles, which promote aggregation and chemical degradation (deamidation of Asn/Gln, oxidation of Met/Trp/Tyr, and disulfide scrambling are recognized peptide degradation pathways). Store away from incompatible materials (see below) and segregated from food, beverages, and animal feed. Keep out of reach of unauthorized personnel; access should be restricted to trained laboratory staff. Label all secondary containers in accordance with 29 CFR 1910.1200(f). Do not return unused material to the original container. No specific shelf-life is established by an authoritative regulatory source; rely on the expiration date supplied with the lot and on periodic identity/purity verification.

Incompatibilities

Keep separated from strong oxidizing agents (e.g., peroxides, hypochlorites, nitric acid, permanganates, chromates), which can oxidize susceptible amino acid residues such as methionine, tryptophan, tyrosine, and cysteine. Avoid contact with strong acids and strong bases, which can catalyze hydrolysis of peptide bonds and side-chain reactions (particularly aspartate-mediated cleavage and racemization under strongly basic conditions), as noted in peer-reviewed

peptide-stability literature. Avoid reducing agents and thiol-containing reagents in storage environments. Protect from moisture, elevated temperatures, direct sunlight, and ultraviolet light, all of which accelerate peptide degradation. Avoid contact with proteases, microbial contamination, and heavy-metal ion contaminants (e.g., Cu2+, Fe3+) that can catalyze oxidative degradation. Hazardous decomposition products under fire or thermal-decomposition conditions may include carbon monoxide, carbon dioxide, and oxides of nitrogen (NO); refer to Section 10 for additional stability and reactivity information.

Section 8 — Exposure Controls / Personal Protection

Exposure Limits

No regulatory occupational exposure limits (OEL) have been established by OSHA, ACGIH, NIOSH, or equivalent bodies for CJC-1295 (CAS 863288-34-0). No biological exposure indices (BEIs) have been established. Control exposure to the lowest level reasonably achievable (ALARA) using the engineering controls and PPE specified below. Handle as a potentially bioactive substance of unknown toxicity. Where no published OEL exists, the NIOSH Occupational Exposure Banding Process (NIOSH Publication 2019-132) may be used by a qualified industrial hygienist to derive a health-based control band for site-specific risk management.

Note: Any internal exposure band or in-house guidance value stated above is industry guidance, not a regulatory limit, and should not be interpreted as an established OEL unless explicitly cited to OSHA, ACGIH, NIOSH, or an equivalent regulatory body.

Engineering Controls

Use in a manner consistent with good laboratory practice and the hierarchy of controls described in 29 CFR 1910.1450 and the NIOSH/CDC guidance for handling potent compounds and pharmaceutical APIs of unknown toxicity. Weighing, opening of primary containers, and reconstitution of the lyophilized peptide should be performed inside a containment device such as a ventilated balance enclosure, a Class I or Class II Type A2/B2 biological safety cabinet, or a chemical fume hood with an average inward face velocity of 80-120 ft/min (0.4-0.6 m/s) verified by the most recent certification. For larger-scale operations, use closed handling systems (e.g., glove boxes or isolators) maintained under negative pressure relative to the surrounding room. Provide local exhaust ventilation at any point where dust or aerosols may be generated. HEPA filtration is recommended on exhaust from primary containment when handling dry powder. Eyewash stations and emergency drench showers meeting ANSI Z358.1-2014 must be accessible within 10 seconds of the work area. Do not eat, drink, smoke, or apply cosmetics in areas where this substance is handled. Decontaminate work surfaces after each use with copious water followed by an appropriate detergent; collect rinsate as chemical waste.

Personal Protective Equipment

Respiratory Protection: Under normal laboratory use within a properly functioning fume hood or containment device, additional respiratory protection is generally not required. For tasks outside primary containment that may generate dust or aerosols (e.g., weighing dry powder on an open bench, sweeping, or response to a spill), use a NIOSH-approved (42 CFR Part 84) air-purifying respirator with an N100, P100, or equivalent particulate filter, or a powered air-purifying respirator (PAPR) with HEPA filters for higher-exposure tasks. Respirator selection, fit-testing, medical clearance, and training must be performed under a written respiratory protection program meeting OSHA 29 CFR 1910.134. Respirator assignment should be based on a documented exposure assessment.

Hand Protection: Wear chemically resistant, powder-free disposable gloves that comply with EN ISO 374-5 (protection against micro-organisms) and EN ISO 374-1 (chemical protection). Nitrile gloves of >=4 mil (0.10 mm) thickness are recommended for routine handling; double-gloving is recommended when weighing dry powder, handling concentrated stocks, or responding to a spill. Inspect gloves before use, change immediately if torn, punctured, or contaminated, and at minimum every 1-2 hours during continuous use. Wash hands thoroughly with soap and water after removing gloves and before leaving the work area. Glove selection should ultimately be confirmed with the glove manufacturer based

on the specific solvent system in use, since aqueous, DMSO, and acidified solutions will give different breakthrough times.

Eye / Face Protection: Wear tightly fitting safety glasses with side shields meeting ANSI/ISEA Z87.1-2020 as a minimum. For procedures with a risk of splash, aerosol generation, or handling of bulk powder, wear indirect-vent chemical splash goggles meeting ANSI/ISEA Z87.1 (D3 splash rating). Add a full-face shield worn over goggles when transferring concentrated solutions, sonicating, or responding to a spill. Contact lenses should not be relied upon as eye protection. Emergency eyewash meeting ANSI Z358.1-2014 must be available within the work area.

Skin Protection: Wear a long-sleeved, fluid-resistant laboratory coat or chemical-resistant gown closed at the front, full-length trousers, and closed-toe, non-absorbent shoes. For bulk handling, weighing of dry powder, or spill cleanup, use a disposable chemical-resistant coverall meeting EN 14605 (Type 4) or equivalent together with disposable overshoes. Remove and replace contaminated clothing immediately; do not launder contaminated disposable garments - discard as chemical waste. Skin that contacts the substance must be washed promptly with soap and water. No skin-notation ("Skin") designation has been assigned by OSHA, NIOSH, or ACGIH for this substance; nevertheless, minimize all dermal contact and treat the material as a potentially bioactive substance of unknown dermal toxicity.

Section 9 — Physical and Chemical Properties

Physical State	Solid (research-grade lyophilised powder or crystalline solid)
Appearance	White to off-white lyophilized powder
Odor	Odorless
Odor Threshold	Not available.
Boiling Point	*Not determined*
Melting Point	*Not determined*
Flash Point	*Not determined*
Auto-ignition Temperature	No data available.
Decomposition Temperature	No experimental data available.
Vapor Pressure	*Not determined*
Vapor Density	*Not determined*
Specific Gravity	*Not determined*
Partition Coefficient (log Kow)	No experimental data available.
Solubility	Soluble in water; soluble in dimethyl sulfoxide (DMSO)
Stability in Solution	Subject to hydrolytic and oxidative degradation typical of the chemical class; store reconstituted solutions refrigerated or frozen, protect from light, and use within the stability window indicated on the Certificate of Analysis.
pH	*Not determined*
Molecular Weight	3367.9 g/mol
Molecular Formula	C152H252N44O42

Section 10 — Stability and Reactivity

Chemical Stability: Stable under normal conditions of use, storage, and transport.

Conditions to Avoid: Excessive heat, open flames, sparks, incompatible materials.

Incompatible Materials: Keep separated from strong oxidizing agents (e.g., peroxides, hypochlorites, nitric acid, permanganates, chromates), which can oxidize susceptible amino acid residues such as methionine, tryptophan, tyrosine, and cysteine. Avoid contact with strong acids and strong bases, which can catalyze hydrolysis of peptide bonds and side-chain reactions (particularly aspartate-mediated cleavage and racemization under strongly basic conditions), as noted in peer-reviewed peptide-stability literature. Avoid reducing agents and thiol-containing reagents in storage environments. Protect from moisture, elevated temperatures, direct sunlight, and ultraviolet light, all of which accelerate peptide degradation. Avoid contact with proteases, microbial contamination, and heavy-metal ion contaminants (e.g., Cu2+, Fe3+) that can catalyze oxidative degradation. Hazardous decomposition products under fire or thermal-decomposition conditions may include carbon monoxide, carbon dioxide, and oxides of nitrogen (NO); refer to Section 10 for additional stability and reactivity information.

Hazardous Decomposition Products: Upon combustion or decomposition may produce: carbon monoxide (CO), carbon dioxide (CO2), nitrogen oxides (NOx).

Hazardous Polymerization: Will not occur.

Section 11 — Toxicological Information

The toxicological properties of this substance have not been fully characterized. Where no authoritative study data was identified, endpoint classifications are based on a weight-of-evidence approach using read-across from the compound's chemical class and structural features, per GHS Rev.8 Chapter 1.3.2.4. “Not classified” entries below mean “not classified based on currently available data” — hazards cannot be excluded.

Acute Toxicity: Acute toxicity data for CJC-1295 (CAS 863288-34-0) are limited and the toxicological profile is not fully characterized. No authoritative LD50 or LC50 values from ECHA, NIOSH, NTP, EPA, or peer-reviewed primary literature have been identified for any exposure route (oral, dermal, or inhalation). In a published Phase I/II clinical study of healthy adults (Teichman et al., J Clin Endocrinol Metab. 2006;91(3):799-805), single and repeated subcutaneous doses were associated most frequently with transient injection-site pain, swelling, induration, and occasional local urticaria; no serious adverse reactions were reported in that study. Because human dosing data cannot substitute for occupational acute-toxicity testing, the substance is not classified for acute toxicity based on currently available data; hazards from accidental high-level occupational exposure (inhalation of dust/aerosol, ingestion, dermal contact) cannot be excluded. Handle as a biologically active substance of unknown acute toxicity.

Skin Corrosion / Irritation: No specific in vitro (OECD TG 431/439) or in vivo (OECD TG 404) skin corrosion/irritation data are available for CJC-1295 from ECHA, EPA, or peer-reviewed sources. Injection-site reactions (transient pain, swelling, induration, local urticaria) reported in the clinical literature (Teichman et al., 2006) reflect parenteral administration and are not directly applicable to dermal hazard classification. Not classified for skin corrosion/irritation based on currently available data; irritant potential on intact skin cannot be excluded, and skin contact should be avoided.

Serious Eye Damage / Irritation: No specific eye irritation or serious eye damage data (OECD TG 405, 437, 438, 491, or 492) for CJC-1295 are available from ECHA, EPA, or peer-reviewed sources. Not classified for serious eye damage/eye irritation based on currently available data; the substance is a fine solid that may cause mechanical and/or chemical irritation on direct ocular contact, and hazards cannot be excluded. Avoid eye contact and use appropriate eye protection.

Skin / Respiratory Sensitization: No specific skin sensitization data (OECD TG 406, 429, 442A/B/C/D/E) or respiratory sensitization data for CJC-1295 are available from ECHA or peer-reviewed sources. CJC-1295 is a synthetic peptide drug substance; the U.S. FDA Pharmacy Compounding Advisory Committee briefing materials (2024) for CJC-1295 DAC acetate specifically identify potential immunogenicity as a concern for peptides of this class, particularly when administered by injectable routes and when peptide-related impurities are present. Not classified for skin or respiratory sensitization based on currently available data; sensitization and immunogenic potential - including hypersensitivity reactions following repeated inhalation or dermal exposure to airborne particulate - cannot be excluded. Handle so as to minimize the generation of dust and aerosol.

Germ Cell Mutagenicity / Genotoxicity: Not classified based on currently available data; hazards cannot be excluded. Weight-of-evidence assessment applied using read-across from chemical class and structural considerations (GHS Rev.8 Chapter 1.3.2.4); no authoritative substance-specific study data identified.

Carcinogenicity: CJC-1295 (CAS 863288-34-0) is not listed as a carcinogen by IARC, the U.S. National Toxicology Program (NTP) Report on Carcinogens, OSHA (29 CFR 1910 Subpart Z), ACGIH TLV carcinogen designations, or the EU CLP harmonised classification list (Annex VI of Regulation (EC) No 1272/2008). No long-term rodent carcinogenicity bioassay data (e.g., OECD TG 451/453) for CJC-1295 have been identified in the published literature. Not classified for carcinogenicity based on currently available data; a carcinogenic hazard cannot be excluded in the absence of chronic studies.

Reproductive Toxicity: No reproductive or developmental toxicity studies (OECD TG 414, 416, 421, 422, 443) for CJC-1295 have been identified in ECHA registration dossiers, U.S. EPA databases, or the peer-reviewed literature. The substance does not appear on the EU CLP Annex VI list of substances classified as reproductive toxicants and is not listed under California Proposition 65 for reproductive toxicity. Not classified for reproductive toxicity or effects on or via lactation based on currently available data; in the absence of guideline studies, reproductive and developmental hazards cannot be excluded. Women who are pregnant, planning pregnancy, or nursing should avoid exposure as a precaution.

Specific Target Organ Toxicity (STOT): Specific Target Organ Toxicity - Single Exposure (STOT-SE): No standardized single-exposure target-organ studies (OECD TG 420/423/425 with target-organ evaluation) for CJC-1295 are available from authoritative sources. Not classified for STOT-SE based on currently available data; single-exposure organ effects cannot be excluded. Specific Target Organ Toxicity - Repeated Exposure (STOT-RE): No subchronic or chronic repeated-dose toxicity studies (OECD TG 407, 408, 409, 410, 411, 413) conforming to GHS STOT-RE evaluation criteria have been identified for CJC-1295 in ECHA, EPA, NTP, or peer-reviewed sources. Not classified for STOT-RE based on currently available data; the toxicological profile is not fully characterized and target-organ effects following repeated occupational exposure cannot be excluded. Minimize repeated or prolonged exposure by any route.

Aspiration Hazard: Not classified based on currently available data; hazards cannot be excluded. Weight-of-evidence assessment applied using read-across from chemical class and structural considerations (GHS Rev.8 Chapter 1.3.2.4); no authoritative substance-specific study data identified.

Derived No-Effect Level (DNEL): No data available — no substance-specific DNEL has been derived.

Predicted No-Effect Concentration (PNEC): No data available — no substance-specific PNEC has been derived.

Section 12 — Ecological Information

No authoritative substance-specific ecotoxicity study data was identified. In the absence of experimental data, adverse environmental effects cannot be fully excluded.

Ecotoxicity: No substance-specific experimental aquatic toxicity data (e.g., fish LC50, Daphnia EC50, algal ErC50) have been identified for CJC-1295 (CAS 863288-34-0) in authoritative sources including PubChem, ECHA, EPA ECOTOX, or peer-reviewed literature. Not classified as hazardous to the aquatic environment under GHS based on a weight-of-evidence assessment in the absence of authoritative experimental data. Prevent release to surface waters, drains, sewers, soil, and groundwater as a precautionary measure.

Persistence and Degradability: No substance-specific experimental data on biodegradation, hydrolysis, or photolysis (OECD 301/302/310 series) have been identified for CJC-1295 in authoritative regulatory databases or peer-reviewed literature. Environmental persistence cannot be reliably estimated from available information.

Bioaccumulative Potential: No substance-specific experimental partition coefficient (log Kow), bioconcentration factor (BCF), or bioaccumulation factor (BAF) data have been identified for CJC-1295 in authoritative sources. Given the high molecular weight (3367.9 g/mol), large number of ionizable and hydrogen-bonding groups, and peptidic nature of the molecule, significant bioaccumulation in aquatic organisms is not anticipated; however, this conclusion is qualitative and not supported by substance-specific experimental measurement.

Mobility in Soil: No substance-specific experimental data identified.

Other Adverse Effects: No other adverse environmental effects identified. The substance is not included on the Montreal Protocol list of ozone-depleting substances.

Section 13 — Disposal Considerations

Dispose of contents and container in accordance with all local, state, and federal regulations. Do not dispose of this material into sewers or waterways. Contact a licensed waste disposal company for disposal guidance.

US: Dispose in accordance with 40 CFR Parts 261-270 (RCRA). **EU:** Dispose according to Directive 2008/98/EC (Waste Framework Directive).

Section 14 — Transport Information

DOT (US)	Not regulated as dangerous goods under DOT (49 CFR) based on current classification.
IATA	Not regulated as dangerous goods under IATA Dangerous Goods Regulations based on current classification.
IMDG	Not regulated as dangerous goods or as a marine pollutant under the IMDG Code based on current classification.
UN Number	Not applicable.

Transport classifications above are based on the substance's intrinsic hazard classification; the shipper must independently verify the classification, packaging, labelling, and documentation requirements for their specific shipment configuration, quantity, and carrier (including airline policies) prior to dispatch.

Section 15 — Regulatory Information

United States

TSCA (Toxic Substances Control Act): May be eligible for exemption from TSCA inventory listing requirements under the R&D provisions of 40 CFR 720.36, depending on actual conditions of use. This substance is supplied solely for use in scientific research and development in small quantities; it is not intended for, and shall not be used for, any commercial manufacturing, processing, or distribution in commerce. The importer/end user is responsible for confirming that the R&D exemption criteria are met for their specific use. **OSHA HazCom 2012:** This SDS was prepared in accordance with 29 CFR 1910.1200 (HazCom 2012), aligned with the Globally Harmonized System (GHS) Rev. 8. **CERCLA / SARA Title III:** Not listed as a CERCLA Hazardous Substance (40 CFR 302.4); not subject to SARA 313 reporting based on available classification data. Users must independently verify applicability for their facility.

European Union

REACH (EC 1907/2006): Supplied solely for Scientific Research and Development (SR&D) use in quantities below 1 tonne per year per legal entity. Where applicable, this use may be exempt from REACH registration obligations under the scientific research and development provisions of REACH Article 3(23) and the conditions of Article 26(3); importers/users should independently verify the applicable exemption pathway for their specific use. If the substance is used as part of a formally notified Product and Process Oriented Research and Development (PPORD) programme, the separate notification procedure under REACH Article 9 (with a 5-year exemption renewable once) may apply

instead. **CLP (EC 1272/2008):** Not classified under CLP based on available data; no harmonized classification entry identified in Annex VI of CLP or the ECHA Classification and Labelling (C&L) Inventory.

Canada

WHMIS 2015 / HPR: Not classified as a hazardous product under the Hazardous Products Act and Hazardous Products Regulations (SOR/2015-17) based on available data and weight-of-evidence assessment. Supplied for laboratory research use only. **DSL/NDSL:** Research-use exemption applies; substance is not intended for commercial import or manufacture in Canada.

Note: The regulatory statements above reflect the intended use of this substance for scientific research and development only and do not constitute a legal determination of regulatory status. If the substance is used outside the R&D exemption scope, users are solely responsible for independently verifying applicable regulatory obligations (TSCA, REACH, WHMIS, state, and local) for their specific use and jurisdiction prior to any such use.

Section 16 — Other Information

Document ID	15e3ebe2-2fef-4e99-90c5-bca9ceb627ad
Revision Date	2026-05-21
Version	1.0
Prepared By	Prepared in accordance with GHS Rev.8 and OSHA HazCom 2012 (29 CFR 1910.1200). Independent review by a qualified chemical safety professional is recommended prior to use.

Revision History

Revision date: 2026-05-21
Version: 1.0
Change description: Initial issue. Document prepared in 16-section GHS Rev.8 / OSHA HazCom 2012 format.

Sources Used

- PubChem (U.S. National Library of Medicine / NCBI) — https://pubchem.ncbi.nlm.nih.gov
- Peer-reviewed chemistry and toxicology literature (class-based read-across and weight-of-evidence assessment per GHS Rev.8 Chapter 1.3.2.4)
- OSHA HazCom 2012 / 29 CFR 1910.1200 Appendix A–C; GHS Rev.8; OECD Test Guidelines

Key to Abbreviations

CAS = Chemical Abstracts Service; GHS = Globally Harmonized System of Classification and Labelling of Chemicals; OSHA = U.S. Occupational Safety and Health Administration; HazCom = Hazard Communication Standard; REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals; CLP = Classification, Labelling and Packaging Regulation; TSCA = Toxic Substances Control Act; WHMIS = Workplace Hazardous Materials Information System; OEL = Occupational Exposure Limit; PEL = Permissible Exposure Limit; TLV = Threshold Limit Value; REL = Recommended Exposure Limit; STOT = Specific Target Organ Toxicity; LD50 = Median Lethal Dose; LC50 = Median Lethal Concentration; PPE = Personal Protective Equipment; SCBA = Self-Contained Breathing Apparatus; R&D = Research and Development.

Disclaimer

DISCLAIMER: The information in this Safety Data Sheet is compiled from the authoritative sources cited above, supplemented by weight-of-evidence assessment based on the compound's chemical class and published literature. It is believed to be accurate as of the revision date but is provided "as is" without warranty of any kind, express or implied, including fitness for a particular purpose. The preparer of this document has not independently tested the substance described herein. Users bear sole responsibility for verifying all information, ensuring safe handling, and compliance

with all applicable federal, state, provincial, and local regulations. This SDS is not a substitute for independent chemical safety assessment by a qualified professional. This product is intended for scientific research and development use only and is not for human consumption, drug, food, cosmetic, agricultural, or household use.

This SDS complies with GHS Revision 8 / UN GHS Rev.8 and OSHA HazCom 2012 (29 CFR 1910.1200).