Viking Stack Peptides

Semaglutide

CAS: 910463-68-2
Formula: C187H291N45O59

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Section 1 — Product and Company Identification

Product Name	Semaglutide
Synonyms	Semaglutide; 910463-68-2; Rybelsus
CAS Number	910463-68-2
PubChem CID	56843331
Molecular Formula	C187H291N45O59
IUPAC Name	18-[[(1R)-4-[2-[2-[2-[2-[2-[2-[[(5S)-5-[[(2S)-2-[[(2S)-2-[[(2S)-5-amino-2-[[2-[[(2S)-2-[[(2S)-2-[[(2S)-2-[[(2S)-2-[[(2S)-2-[[(2S)-2-[[(2S)-2-[[(2S,3R)-2-[[(2S)-2-[[(2S,3R)-2-[[2-[[(2S)-2-[[2-[[(2S)-2-amino-3-(1H-imidazol-5-yl)propanoyl]amino]-2-methylpropanoyl]amino]-4-carboxybutanoyl]amino]acetyl]amino]-3-hydroxybutanoyl]amino]-3-phenylpropanoyl]amino]-3-hydroxybutanoyl]amino]-3-hydroxypropanoyl]amino]-3-carboxypropanoyl]amino]-3-methylbutanoyl]amino]-3-hydroxypropanoyl]amino]-3-hydroxypropanoyl]amino]-3-(4-hydroxyphenyl)propanoyl]amino]-4-methylpentanoyl]amino]-4-carboxybutanoyl]amino]acetyl]amino]-5-oxopentanoyl]amino]propanoyl]amino]propanoyl]amino]-6-[[(2S)-1-[[(2S)-1-[[(2S,3S)-1-[[(2S)-1-[[(2S)-1-[[(2S)-1-[[(2S)-5-carbamimidamido-1-[[2-[[(2S)-5-carbamimidamido-1-(carboxymethylamino)-1-oxopentan-2-yl]amino]-2-oxoethyl]amino]-1-oxopentan-2-yl]amino]-3-methyl-1-oxobutan-2-yl]amino]-4-methyl-1-oxopentan-2-yl]amino]-3-(1H-indol-3-yl)-1-oxopropan-2-yl]amino]-1-oxopropan-2-yl]amino]-3-methyl-1-oxopentan-2-yl]amino]-1-oxo-3-phenylpropan-2-yl]amino]-4-carboxy-1-oxobutan-2-yl]amino]-6-oxohexyl]amino]-2-oxoethoxy]ethoxy]ethylamino]-2-oxoethoxy]ethoxy]ethylamino]-1-carb… [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	Viking Stack Peptides
Address	560, Fort Worth, TX 76137, United States
Phone	8178816217
Emergency Phone	8178816217

Section 2 — Hazard Identification

Classification of the substance

Classified under GHS Rev.8 / OSHA HazCom 2012 — see hazard statements below.

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: **DANGER**

GHS Pictograms:

GHS07 GHS08

Hazard Statements

- H302+H312+H332: Harmful if swallowed, in contact with skin or if inhaled [Warning Acute toxicity, oral; acute toxicity, dermal; acute toxicity, inhalation]
- H302: Harmful if swallowed [Warning Acute toxicity, oral]
- H312: Harmful in contact with skin [Warning Acute toxicity, dermal]
- H315: Causes skin irritation [Warning Skin corrosion/irritation]
- H319: Causes serious eye irritation [Warning Serious eye damage/eye irritation]
- H332: Harmful if inhaled [Warning Acute toxicity, inhalation]
- H351: Suspected of causing cancer [Warning Carcinogenicity]
- H360D: May damage the unborn child [Danger Reproductive toxicity]
- H361: Suspected of damaging fertility or the unborn child [Warning Reproductive toxicity]
- H361d: Suspected of damaging the unborn child [Warning Reproductive toxicity]
- H373: May causes damage to organs through prolonged or repeated exposure [Warning Specific target organ toxicity, repeated exposure]

Precautionary Statements

- P203
- P260
- P261

- P264
- P264+P265
- P270
- P271
- P280
- P301+P317
- P302+P352
- P304+P340
- P305+P351+P338
- P317
- P318
- P319
- P321
- P330
- P332+P317
- P337+P317
- P362+P364
- P405
- P501

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
Semaglutide	910463-68-2	C187H291N45O59	4114 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

Immediately flush eyes with large amounts of water for at least 15 minutes, lifting the upper and lower eyelids. Remove contact lenses if present and easy to do. Seek immediate medical attention.

Skin Contact

Remove contaminated clothing immediately. Wash affected area with soap and water for at least 15 minutes. Seek medical attention if irritation or symptoms develop.

Inhalation

Move affected person to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, administer oxygen. Seek immediate medical attention.

Ingestion
Do NOT induce vomiting. Rinse mouth with water. Seek immediate medical attention. If conscious, give 1-2 glasses of water.

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 Semaglutide (CAS 910463-68-2) as a potentially bioactive peptide of unknown occupational toxicity in accordance with OSHA HazCom 2012 (29 CFR 1910.1200) and general laboratory chemical hygiene practice (29 CFR 1910.1450). Operations should be carried out in a well-ventilated area, preferably within a certified chemical fume hood, ventilated weighing enclosure, or Class II biological safety cabinet to control airborne particulates; powder handling should be performed in a manner that minimizes generation of dust and aerosols. No OSHA PEL, NIOSH REL, or ACGIH TLV has been established for this substance; therefore, exposures should be controlled to the lowest feasible level using engineering controls and personal protective equipment as described in Section 8. Wear chemical-resistant gloves, a buttoned laboratory coat, and ANSI Z87.1-compliant safety eyewear; use a NIOSH-approved particulate respirator (e.g., N95 or higher) when engineering controls are insufficient to prevent inhalation of dust. Avoid contact

with skin, eyes, and clothing, and avoid inhalation or ingestion. Do not eat, drink, smoke, or apply cosmetics in areas where this material is handled. Wash hands and exposed skin thoroughly with soap and water after handling and before leaving the work area. Keep containers tightly closed when not in use to limit exposure to atmospheric moisture, oxygen, and light. Use non-sparking tools and ground/bond containers when transferring larger quantities of dry powder to mitigate potential static-electric ignition of combustible dust. Decontaminate work surfaces and reusable equipment after use, and segregate contaminated waste for disposal in accordance with Section 13.

Storage Conditions

Store the substance in tightly closed, labeled original containers in a cool, dry, well-ventilated area protected from light, moisture, and incompatible materials, consistent with general good practice for peptide active pharmaceutical ingredients. As a lyophilized synthetic peptide, the bulk substance is typically stored refrigerated (2-8 degC) or frozen (-20 degC); confirm the recommended storage temperature on the certificate of analysis or product label for the specific lot, and avoid repeated freeze-thaw cycles of reconstituted solutions, as peptides are susceptible to hydrolysis, oxidation, and aggregation under suboptimal conditions (Regulatory Guidelines for the Analysis of Therapeutic Peptides and Proteins, PMC11806371). Keep containers sealed under an inert atmosphere (e.g., nitrogen or argon) where practical to limit moisture uptake and oxidative degradation. Storage areas should be secured against unauthorized access, separated from food and beverages, equipped with secondary containment, and constructed of materials resistant to the substance. Do not store with strong oxidizers, strong acids, or strong bases (see Incompatibilities). Maintain an up-to-date inventory and observe the manufacturer's assigned re-test or expiration date; do not use material beyond that date without re-qualification.

Incompatibilities

Avoid contact with strong oxidizing agents (e.g., peroxides, perchlorates, permanganates, hypochlorites), which can degrade peptide bonds and side-chain functional groups and may produce hazardous decomposition products. Avoid strong acids and strong bases, which promote hydrolysis of amide bonds; strong reducing agents, which can reduce disulfide and other susceptible moieties; and electrophilic or alkylating reagents that may react with free amine, carboxyl, hydroxyl, imidazole, or amide functional groups present in the molecule. The substance is moisture- and light-sensitive; prolonged exposure to humid air, elevated temperature, or UV/visible light can accelerate chemical and physical degradation (deamidation, oxidation, aggregation). Hazardous thermal decomposition products may include carbon monoxide, carbon dioxide, nitrogen oxides (NOx), and other toxic/irritating organic fragments, as expected from a high-molecular-weight nitrogen-containing peptide (C187H291N45O59). Keep away from open flames, hot surfaces, and other ignition sources, as fine organic powders can present a combustible-dust hazard.

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 semaglutide (CAS 910463-68-2). 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 occupational toxicity; semaglutide is a synthetic GLP-1 receptor agonist peptide (C187H291N45O59; MW ~4114 Da) and should be managed under the employer's hazardous-drug or potent-API control program consistent with the principles in NIOSH Publication No. 2020-106 (Managing Hazardous Drug Exposures) and the NIOSH framework for Occupational Exposure Banding (DHHS/NIOSH Pub. No. 2019-132) when no compound-specific OEL is available.

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 closed system wherever feasible. Weighing, dispensing, and manipulation of the dry powder or concentrated solutions should be performed in a ventilated enclosure such as a ducted fume hood, ventilated balance enclosure / powder containment hood, or Class II biological safety cabinet, in accordance with ANSI/AIHA Z9.5 and the hierarchy of controls described by NIOSH (CDC/NIOSH Hierarchy of Controls). Provide local exhaust ventilation (LEV) at points of dust or aerosol generation; HEPA-filter exhaust where recirculation is unavoidable. Maintain the work area under negative pressure relative to surrounding spaces when handling open powder. Provide readily accessible emergency eyewash and safety shower meeting ANSI Z358.1 within the work area. Prohibit eating, drinking, smoking, and cosmetic application in handling areas (29 CFR 1910.141). Implement decontamination and surface-wipe sampling procedures; segregate waste as pharmaceutical/biohazardous as appropriate under 40 CFR 261 and state requirements.

Personal Protective Equipment

Respiratory Protection: No NIOSH-assigned respiratory protection level exists for semaglutide because no OEL has been published. Where engineering controls (closed systems, ventilated enclosures) maintain airborne exposure below a level demonstrated by exposure assessment, respiratory protection may not be required. For tasks with potential for airborne particulate or aerosol generation (weighing open powder, lyophilizate handling, sonication, spray-drying, spill response) use, at minimum, a NIOSH-approved air-purifying respirator with N100/P100 or equivalent particulate filter; for higher-exposure or uncharacterized tasks use a powered air-purifying respirator (PAPR) with HEPA filters or a supplied-air respirator. All respirator use must comply with OSHA 29 CFR 1910.134 (written program, fit-testing, medical evaluation, training).

Hand Protection: Wear chemical-resistant, powder-free gloves selected in accordance with EN ISO 374-1 / ASTM D6978 (the ASTM standard for chemotherapy/hazardous-drug glove permeation is recommended for cytostatic-style potent pharmaceuticals and is appropriate as a conservative default for an uncharacterized peptide API). Nitrile gloves of >= 0.11 mm (4-mil) thickness are generally suitable; double-gloving is recommended when handling open powder or for spill response. Inspect gloves before use, change immediately if torn, punctured, or contaminated, and at minimum every 30 minutes during continuous use, consistent with USP <800> guidance for hazardous drugs. Wash hands with soap and water after glove removal (29 CFR 1910.132).

Eye / Face Protection: Wear tight-fitting chemical splash goggles meeting ANSI/ISEA Z87.1 when handling powders or solutions. Add a face shield (also ANSI/ISEA Z87.1 compliant) over goggles when there is a potential for splash, spray, or ejection of material (e.g., transfer of bulk powder, vortexing of concentrated solutions, opening pressurized vials). Ordinary safety glasses with side shields are not sufficient for open-powder operations.

Skin Protection: Wear a long-sleeved, low-linting laboratory coat or coverall with knit cuffs; for handling of bulk powder, spill cleanup, or other higher-exposure tasks use a disposable chemotherapy-grade gown that is back-closing, impermeable to liquids, and made of polyethylene-coated polypropylene or equivalent (consistent with USP <800> recommendations for hazardous drugs). Cover footwear with disposable shoe covers when handling open powder. Remove and dispose of contaminated PPE in designated pharmaceutical/hazardous-drug waste streams; do not launder disposable garments. Skin that contacts the material should be washed promptly with soap and water. Comply with OSHA 29 CFR 1910.132 (general PPE) and 29 CFR 1910.138 (hand protection).

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 and aqueous buffers; sparingly soluble in ethanol
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	7.4 (formulated injection solution)
Molecular Weight	4114 g/mol
Molecular Formula	C187H291N45O59

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: Avoid contact with strong oxidizing agents (e.g., peroxides, perchlorates, permanganates, hypochlorites), which can degrade peptide bonds and side-chain functional groups and may produce hazardous decomposition products. Avoid strong acids and strong bases, which promote hydrolysis of amide bonds; strong reducing agents, which can reduce disulfide and other susceptible moieties; and electrophilic or alkylating reagents that may react with free amine, carboxyl, hydroxyl, imidazole, or amide functional groups present in the molecule. The substance is moisture- and light-sensitive; prolonged exposure to humid air, elevated temperature, or UV/visible light can accelerate chemical and physical degradation (deamidation, oxidation, aggregation). Hazardous thermal decomposition products may include carbon monoxide, carbon dioxide, nitrogen oxides (NOx), and other toxic/irritating organic fragments, as expected from a high-molecular-weight nitrogen-containing peptide (C187H291N45O59). Keep away from open flames, hot surfaces, and other ignition sources, as fine organic powders can present a combustible--dust hazard.

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 semaglutide (CAS 910463-68-2) in humans by occupational exposure routes (oral, dermal, inhalation) are not fully characterized. No authoritative acute toxicity values (LD50/LC50) meeting GHS classification criteria have been identified in OSHA, NIOSH, ECHA, or peer-reviewed primary sources for the pure substance. Reported adverse effects in clinical use (per the FDA-approved prescribing information) include gastrointestinal effects such as nausea, vomiting, diarrhea, abdominal pain, constipation, and decreased appetite;

these reflect pharmacological dosing rather than occupational exposure and are not used to derive a GHS acute toxicity classification. Not classified based on currently available data; hazards cannot be excluded, and the substance should be handled as if potentially hazardous in accordance with GHS Rev.8 S1.3.2.4.

Skin Corrosion / Irritation: No data from authoritative sources (OSHA, NIOSH, ECHA, or peer-reviewed literature) on skin corrosion or irritation potential of semaglutide following dermal contact with the bulk substance have been identified. Injection-site reactions are reported in the FDA-approved prescribing information for therapeutic subcutaneous administration, but these are not predictive of dermal corrosivity/irritation under GHS criteria. Not classified based on currently available data; hazards cannot be excluded. Skin contact with the powder or solutions should be avoided.

Serious Eye Damage / Irritation: No data from authoritative sources on serious eye damage or eye irritation potential of semaglutide have been identified. Not classified based on currently available data; hazards cannot be excluded. Eye contact with the powder or solutions should be avoided as a precaution.

Skin / Respiratory Sensitization: No data from authoritative sources establishing respiratory or skin sensitization potential of semaglutide have been identified. Hypersensitivity reactions (including anaphylaxis and angioedema) have been reported in post-marketing experience with therapeutic use, as noted in the FDA-approved prescribing information, but a GHS sensitization classification cannot be derived from these reports alone. Not classified based on currently available data; hazards cannot be excluded; handle so as to minimize the potential for exposure that could lead to sensitization.

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: Semaglutide is not listed by IARC, NTP (Report on Carcinogens), OSHA (29 CFR 1910.1003), or ACGIH as a carcinogen. In 2-year rodent carcinogenicity studies summarized in the FDA-approved prescribing information (Ozempic, Wegovy, Rybelsus, Section 13.1, Nonclinical Toxicology), semaglutide caused a dose-related and treatment-duration-dependent increase in the incidence of thyroid C-cell tumors (adenomas and carcinomas) in both male and female rats and mice at clinically relevant exposures. On this basis, FDA has issued a Boxed Warning regarding the risk of thyroid C-cell tumors. The human relevance of rodent thyroid C-cell tumors produced by GLP-1 receptor agonists could not be determined from clinical or nonclinical studies. This finding should be considered in occupational hazard assessment even though semaglutide has not been formally GHS-classified for carcinogenicity by an authoritative regulatory body.

Reproductive Toxicity: According to the FDA-approved prescribing information (Ozempic/Wegovy, Section 8.1 and 13.1), animal reproduction studies showed potential risk to the fetus. In pregnant rats administered semaglutide during organogenesis, embryofetal mortality, structural abnormalities, and growth alterations were observed at maternal exposures below the maximum recommended human dose (MRHD). In pregnant rabbits and cynomolgus monkeys, early pregnancy loss and structural abnormalities were observed at exposures below (rabbit) and above (monkey) the MRHD. A fertility study in rats reported increased estrous cycle length and a small reduction in the number of corpora lutea at doses >=0.03 mg/kg/day. These nonclinical findings indicate reproductive/developmental hazard potential. Women of reproductive potential should avoid occupational exposure; the substance should be handled accordingly.

Specific Target Organ Toxicity (STOT): Specific Target Organ Toxicity - Single Exposure (STOT-SE): No data from authoritative sources supporting a GHS STOT-SE classification have been identified; not classified based on currently available data, and hazards cannot be excluded. Specific Target Organ Toxicity - Repeated Exposure (STOT-RE): Repeat-dose nonclinical studies summarized in the FDA-approved prescribing information identified the thyroid (C-cell hyperplasia and neoplasia in rodents) as a target tissue following repeated administration; gastrointestinal effects are also prominent in repeat-dose animal studies and in clinical use. A formal GHS STOT-RE classification has not been assigned by an authoritative regulatory body; however, these findings should inform occupational risk management. Toxicological properties of semaglutide are not fully characterized for the workplace exposure setting.

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 semaglutide (CAS 910463-68-2) in authoritative sources (ECHA, EPA ECOTOX, PubChem). The European Medicines Agency (EMA) environmental risk assessment for semaglutide (Wegovy EPAR, EMA/CHMP) reported a Phase I Predicted Environmental Concentration in surface water (PECsw) of 0.002 ug/L, which is below the 0.01 ug/L action limit that would trigger a Phase II aquatic effects assessment. On this basis, the EMA concluded that use of semaglutide in humans is not expected to result in a risk to environmental organisms. Not formally classified as hazardous to the aquatic environment under GHS based on weight-of-evidence assessment (no authoritative experimental ecotoxicity data identified). Avoid release to the environment.

Persistence and Degradability: No substance-specific experimental biodegradation studies (e.g., OECD 301 series) have been identified in authoritative sources for semaglutide. The EMA Wegovy environmental risk assessment notes that semaglutide is a large modified peptide (C187H291N45O59, MW ~ 4114 g/mol) and that the log Kow is expected to be below the PBT screening cut-off of 4.5; however, semaglutide contains a non-natural fatty diacid side chain and is engineered for resistance to dipeptidyl peptidase-4 (DPP-4) degradation, so simple read-across to native-peptide biodegradability is not appropriate. No substance-specific experimental data on environmental persistence identified.

Bioaccumulative Potential: No experimentally determined bioconcentration factor (BCF) or measured log Kow has been identified for semaglutide in authoritative sources (ECHA, PubChem, EPA). The EMA Wegovy EPAR states that the log Kow of semaglutide is expected to be below the PBT/bioaccumulation screening threshold of 4.5, indicating low bioaccumulation potential is anticipated based on its high molecular weight (~4114 g/mol), peptidic/ionizable character, and limited expected membrane permeability. No substance-specific experimental bioaccumulation data identified.

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)	May be classified as a hazardous material for transport. Consult applicable transport regulations (49 CFR, IATA DGR, IMDG Code) before shipping.
IATA	

	May be restricted - consult current IATA Dangerous Goods Regulations.
IMDG	May be classified under IMDG Code - consult regulations before sea shipment.
UN Number	Consult applicable SDS and transport regulations.

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	67ffb7ff-a3fc-43b9-bf9f-2c16e6673a37
Revision Date	2026-09-11
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: 2026-09-11
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).