SNAP-8

CAS: 868844-74-0
Formula: C42H72N16O15S

Document ID: 1d11d460
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Section 1 — Product and Company Identification

Product Name	SNAP-8
Synonyms	Acetyl octapeptide-3; UNII-8K14HJF88S; 8K14HJF88S
CAS Number	868844-74-0
Molecular Formula	C42H72N16O15S
IUPAC Name	(4S)-4-acetamido-5-[[(2S)-1-[[(2S)-1-[[(2S)-5-amino-1-[[(2S)-1-[[(2S)-1-[[(2S)-1-[[(2S)-1-amino-3-carboxy-1-oxopropan-2-yl]amino]-1-oxopropan-2-yl]amino]-5-(diaminomethylideneamino)-1-oxopentan-2-yl]amino]-5-(diaminomethylideneamino)-1-oxopentan-2-yl]amino]-1,5-dioxopentan-2-yl]amino]-4-methylsulfanyl-1-oxobutan-2-yl]amino]-4-carboxy-1-oxobutan-2-yl]amino]hex-5-enoic acid
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	Ruo.bio
Address	30 N Gould St, Sheridan, WY 82801, US
Phone	+1-804-636-6879
Website	https://ruo.bio/
Emergency Phone	+1(804)636-6879 - Monday-Friday: 9:00 AM - 5:00 PM Pacific

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
SNAP-8	868844-74-0	C42H72N16O15S	1073.2 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 in accordance with good industrial hygiene and safety practice as outlined in OSHA 29 CFR 1910.1200 and 1910.132-1910.138. Treat as a potentially bioactive substance of incompletely characterized toxicity: minimize generation and inhalation of dust or aerosols, avoid contact with skin, eyes, and clothing, and do not ingest. Weigh and manipulate the dry solid in a ventilated enclosure (e.g., fume hood, ventilated balance enclosure, or glove box) to control airborne particulate, consistent with the NIOSH Hierarchy of Controls. Use anti-static measures for fine powders where appropriate. Wear chemically resistant gloves, safety eyewear meeting ANSI/ISEA Z87.1, and a laboratory coat; select respiratory protection per OSHA 29 CFR 1910.134 if engineering controls are insufficient to control airborne exposure. Do not eat, drink, smoke, or apply cosmetics in areas where the substance is handled. Wash hands and exposed skin thoroughly after handling and before breaks. Allow sealed containers removed from cold storage to equilibrate to room temperature before opening to prevent moisture condensation on the hygroscopic peptide solid. Avoid repeated freeze-thaw cycles of reconstituted solutions; prepare working aliquots to minimize handling of the bulk material. Promptly clean spills using methods that avoid dust dispersion (e.g., damp wiping or HEPA-filtered vacuum) and decontaminate work surfaces after use.

Storage Conditions

Store the lyophilized solid tightly closed in the original container, under an inert atmosphere (nitrogen or argon) where practicable, protected from light, moisture, and heat. Refrigerated storage at 2-8 degC is suitable for short-term storage; for long-term storage, store frozen (typically <= -20 degC; <= -80 degC for extended periods) as is standard practice for lyophilized peptides. Keep desiccated; peptides containing methionine, glutamine, asparagine, and arginine residues are susceptible to hydrolysis, deamidation, and oxidation in the presence of moisture and air. Store away from sources of ignition, direct sunlight, and incompatible materials (see below). Storage area should be cool, dry, well-ventilated, and accessible only to authorized personnel. Reconstituted solutions should be stored at the temperature and pH appropriate to the chosen solvent system and used promptly; do not return unused reconstituted material to the original container. No specific manufacturer shelf-life is established in authoritative regulatory sources for this substance; follow expiration dating provided on the container.

Incompatibilities

Strong oxidizing agents (which can oxidize the methionine thioether and guanidino groups), strong acids and strong bases (which can hydrolyze peptide bonds and the C-terminal amide and side-chain amides of glutamine and asparagine), strong reducing agents, and electrophilic or alkylating reagents. Avoid prolonged exposure to moisture, atmospheric oxygen, elevated temperatures, and ultraviolet light, all of which can promote deamidation of Gln/Asn residues, methionine oxidation, and general peptide degradation. No hazardous polymerization is expected. Hazardous decomposition products under fire conditions may include carbon oxides (CO, CO2), nitrogen oxides (NOx), and sulfur oxides (SOx), as expected from a sulfur- and nitrogen-containing organic compound.

Section 8 — Exposure Controls / Personal Protection

Exposure Limits

No regulatory occupational exposure limits (OEL) have been established by OSHA, ACGIH, NIOSH, or equivalent bodies. 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. Acetyl octapeptide-3 (CAS 868844-74-0) is not listed in OSHA 29 CFR 1910.1000 Tables Z-1, Z-2, or Z-3; is not assigned an ACGIH TLV; is not listed in the NIOSH Pocket Guide; and has no DFG MAK or EU IOELV. Handle as a potentially bioactive substance of unknown toxicity.

Engineering Controls

Use in accordance with good laboratory/industrial hygiene practice as outlined in OSHA 29 CFR 1910.1450 (Occupational Exposure to Hazardous Chemicals in Laboratories) and the principles of ANSI/AIHA Z9.5 for laboratory ventilation. Perform all weighing, transfer, and manipulation of the dry powder inside a certified chemical fume hood,

ventilated balance enclosure, or Class I/II biological safety cabinet to minimize generation of airborne particulates and aerosols. For larger-scale operations, use closed-system transfer or local exhaust ventilation consistent with ISPE/AIHA guidance for containment of synthetic peptide APIs. Maintain general dilution ventilation appropriate for the work area. Provide an emergency eyewash station and safety shower within the immediate work area, conforming to ANSI/ISEA Z358.1. Restrict access to trained personnel only; do not eat, drink, smoke, or store food in areas where the material is handled. Decontaminate work surfaces and equipment after use.

Personal Protective Equipment

Respiratory Protection: Where engineering controls (fume hood or ventilated enclosure) adequately contain the material, additional respiratory protection is generally not required. If dust, mist, or aerosol generation is possible outside of containment, or during weighing/dispensing of bulk powder, use a NIOSH-approved (42 CFR Part 84) air-purifying respirator equipped with N95 or higher-efficiency particulate filters (e.g., N100/P100) at minimum. For higher exposure potential or unknown airborne concentrations, use a powered air-purifying respirator (PAPR) with HEPA filters or a supplied-air respirator. All respirator use must be in accordance with a written respiratory protection program meeting OSHA 29 CFR 1910.134, including medical clearance, fit testing, and training.

Hand Protection: Wear chemically resistant, impervious protective gloves conforming to EN ISO 374-1 / ASTM F739 permeation testing requirements. Nitrile rubber gloves of at least 0.11 mm thickness are recommended for incidental contact; double-gloving is advised when handling the dry powder or stock solutions. Inspect gloves before use; remove and replace immediately if torn, punctured, or contaminated. Wash hands thoroughly with soap and water after removing gloves and before leaving the work area. Glove selection should be verified for the specific solvent system if the peptide is dissolved (e.g., DMSO requires butyl rubber or specifically tested gloves, as nitrile offers limited DMSO resistance).

Eye / Face Protection: Wear tight-fitting safety glasses with side shields meeting ANSI/ISEA Z87.1-2020 as a minimum. For operations with splash or aerosol potential (e.g., dissolving powder, transferring solutions), wear chemical splash goggles, and add a face shield (ANSI Z87.1) worn over goggles when handling larger quantities or pressurized systems. Do not wear contact lenses when working with this material unless splash goggles are also worn.

Skin Protection: Wear a long-sleeved laboratory coat or chemical-resistant lab gown, full-length trousers, and closed-toe chemical-resistant footwear. For handling bulk quantities or operations with significant splash/dust potential, wear a chemically resistant apron or disposable Tyvek (or equivalent) coverall over the lab coat. Remove contaminated clothing promptly and launder before reuse; dispose of disposable garments as contaminated waste. Do not take contaminated clothing home. Skin contact areas should be washed promptly with soap and water if contact occurs.

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
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	1073.2 g/mol
Molecular Formula	C42H72N16O15S

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: Strong oxidizing agents (which can oxidize the methionine thioether and guanidino groups), strong acids and strong bases (which can hydrolyze peptide bonds and the C-terminal amide and side-chain amides of glutamine and asparagine), strong reducing agents, and electrophilic or alkylating reagents. Avoid prolonged exposure to moisture, atmospheric oxygen, elevated temperatures, and ultraviolet light, all of which can promote deamidation of Gln/Asn residues, methionine oxidation, and general peptide degradation. No hazardous polymerization is expected. Hazardous decomposition products under fire conditions may include carbon oxides (CO, CO2), nitrogen oxides (NOx), and sulfur oxides (SOx), as expected from a sulfur- and nitrogen-containing organic compound.

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

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 Acetyl octapeptide-3 (CAS 868844-74-0) from authoritative regulatory sources (OSHA, NIOSH, NTP, EPA, ECHA) are not available, and no oral, dermal, or inhalation LD50/LC50 values have been published in peer-reviewed literature for this substance. The toxicological properties have not been fully characterized. Not classified for acute toxicity based on currently available data; hazards cannot be excluded (GHS Rev.8, Chapter 1.3.2.4). Handle in accordance with good industrial hygiene and safety practice; avoid ingestion, inhalation of dust or aerosols, and skin/eye contact.

Skin Corrosion / Irritation: No data from authoritative sources (ECHA, OSHA, NIOSH) describing skin corrosion or irritation studies (e.g., OECD TG 404, 439, or 431) are available for Acetyl octapeptide-3. The substance has not been fully characterized for dermal irritation/corrosion potential. Not classified for skin corrosion/irritation based on currently available data; hazards cannot be excluded (GHS Rev.8, Chapter 1.3.2.4). Mechanical or physical irritation from contact with solid material should be avoided.

Serious Eye Damage / Irritation: No data from authoritative sources (ECHA, OSHA, NIOSH) describing serious eye damage or eye irritation studies (e.g., OECD TG 405, 437, 438, 492) are available for Acetyl octapeptide-3. The eye irritation potential has not been fully characterized. Not classified for serious eye damage/eye irritation based on

currently available data; hazards cannot be excluded (GHS Rev.8, Chapter 1.3.2.4). Direct contact with the eyes may cause mechanical irritation and should be avoided.

Skin / Respiratory Sensitization: No data from authoritative sources (ECHA, OSHA, NIOSH) on respiratory or skin sensitization (e.g., OECD TG 406, 429, 442A-442E studies) are available for Acetyl octapeptide-3. Sensitization potential has not been fully characterized. Not classified for respiratory or skin sensitization based on currently available data; hazards cannot be excluded (GHS Rev.8, Chapter 1.3.2.4). As with other proteinaceous and peptide materials, the possibility of sensitization in susceptible individuals upon repeated exposure cannot be ruled out.

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: Acetyl octapeptide-3 (CAS 868844-74-0) is not listed by IARC, the U.S. National Toxicology Program (NTP) Report on Carcinogens, OSHA (29 CFR 1910 Subpart Z), the U.S. EPA Integrated Risk Information System (IRIS), or the ACGIH carcinogen list. No long-term carcinogenicity bioassays have been published for this substance. Carcinogenic potential has not been fully characterized. Not classified for carcinogenicity based on currently available data; hazards cannot be excluded (GHS Rev.8, Chapter 1.3.2.4).

Reproductive Toxicity: No reproductive, developmental, or fertility toxicity studies (e.g., OECD TG 414, 416, 421, 422, 443) from authoritative sources (ECHA, NTP, EPA) are available for Acetyl octapeptide-3. The substance is not listed under California Proposition 65 for reproductive toxicity. Effects on or via lactation have likewise not been studied. Reproductive and developmental toxicity have not been fully characterized. Not classified for reproductive toxicity based on currently available data; hazards cannot be excluded (GHS Rev.8, Chapter 1.3.2.4).

Specific Target Organ Toxicity (STOT): Specific target organ toxicity - single exposure (STOT-SE) and repeated exposure (STOT-RE): No subacute, subchronic, or chronic repeated-dose toxicity studies (e.g., OECD TG 407, 408, 410, 411, 452) and no single-exposure target-organ studies from authoritative sources (ECHA, NTP, EPA, NIOSH) are available for Acetyl octapeptide-3. No occupational exposure limits (OSHA PEL, NIOSH REL, ACGIH TLV) have been established for this substance. Target organ effects following single or repeated exposure have not been fully characterized. Not classified for STOT-SE or STOT-RE based on currently available data; hazards cannot be excluded (GHS Rev.8, Chapter 1.3.2.4).

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, algae ErC50) were identified for Acetyl octapeptide-3 (CAS 868844-74-0) in authoritative regulatory databases including ECHA, EPA CompTox, or PubChem. Not classified as hazardous to the aquatic environment based on weight-of-evidence assessment (no authoritative experimental data identified). Prevent release to surface waters, soil, drains, and groundwater as a precautionary measure.

Persistence and Degradability: No substance-specific experimental biodegradation or abiotic degradation data (e.g., OECD 301 ready biodegradability, hydrolysis half-life) were identified for this substance in authoritative sources (ECHA, EPA CompTox/DSSTox DTXSID70235943, PubChem). Environmental persistence has not been characterized.

Bioaccumulative Potential: No substance-specific experimental bioconcentration factor (BCF) or measured log Kow data were identified in authoritative sources for CAS 868844-74-0. Given the high molecular weight (1073.2

g/mol), the polar, multiply-ionizable peptide backbone, and the expected low octanol/water partitioning typical of such structures, significant bioaccumulation potential is not anticipated; however, this should not be considered a substitute for experimental data.

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	1d11d460-9b33-4be0-91ab-1aa290b906c3
Revision Date	2026-08-07
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: 2026-08-07
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).