



SAFETY DATA SHEET

Revision

Date: 04-26-17

1. Identification of the substance/mixture and of the company/undertaking

Product identifier: PPL-1190
Product Code: Not Available.
CAS No.: 204656-20-2
Synonyms: Liraglutide

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2. IDENTIFICATION

2.1 Classification of the substance or mixture:

PPL-1190 is a harmful substance that may cause sensitization by inhalation and skin contact.

H302: Harmful if swallowed.

H373: May cause damage to organs through prolonged or repeated exposure.

Special caution should always be taken in the handling of biologically active material

Skin irritant(2) Eye irritant (3)

Wording of R-phrases and hazard statements – see section 16

2.2 Label elements:



Warning

Contents: PPL -1190

H302: Harmful if swallowed.

H373: May cause damage to organs through prolonged or repeated exposure.

P260: Do not breathe dust.

P280: Wear protective gloves/protective clothing/eye protection

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

Other hazards:

None known.

3. Composition/information on ingredients

Substances:

% w/w	Substance name	CAS-no.	EC-no.	Index-no.	REACH reg.no.
100	Liraglutide	204656-20-2	Not Available.	Not Available.	Not Available.

Classification

Mol. Wt.: 3751.0 g/mol

Note:

Chemical Structure: C₁₇₂H₂₆₅N₄₃O₅₁

H-His-Ala-Glu-Gly-Thr-Phe-Thr-Ser-Asp-Val-Ser-Ser-Tyr-Leu-Glu-Gly-Gln-Ala-Ala-Lys(Hexadecanoyl-Glu(OH))-Lys(Hexadecanoyl-Glu(OH))-Glu-Phe-Ile-Ala-Trp-Leu-Val-Arg-Gly-Arg-Gly-OH

4. First-aid measures

If swallowed, do not induce vomiting. Give large quantities of water to drink and get medical attention immediately. Never give anything by mouth to an unconscious person. Consult a physician.

In case of skin contact, wash exposed area with soap and water. Consult a physician if irritation develops.

If inhaled, remove to fresh air. If breathing becomes difficult, consult a physician.

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Consult a physician.

5. Fire-fighting measures

Extinguishing Media:

Carbon dioxide, dry chemical powder or appropriate foam. Water spray.

Special fire fighting procedures:

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Unusual fire and explosions hazards:

Emits toxic fumes under fire conditions.

6. Accidental release measures

Wear full face respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Contain spillage; prevent further leakage if safe to do so. Do not let product enter drains. Sweep up the spill and collect in a bag for disposal according to local, state and federal regulations. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7. Handling and storage

Store below =20°C and protected from light.

Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product. Keep tightly closed. Store in a cool dry place.

8. Exposure controls/Personal protection

Wear appropriate NIOSH / MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.

Use only in a chemical fume hood.

Safety shower and eye wash station.

Wash thoroughly after handling.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety practice.

Wash hands before breaks and at the end of the day.

9. Physical and chemical properties

Appearance:	Solid powder.
Odor:	Not determined.
Mol. Wt.:	3751.20
pH (aqueous solution of 1 %):	Not determined.
Melting point/freezing point (°C):	Not determined.
Initial boiling point and boiling range (°C):	Not determined
Flash point (°C):	Not determined
Evaporation rate:	Not determined
Flammability (solid, gas):	Not determined
Upper/lower flammability or explosive limits (vol-%):	Not determined
Vapour pressure:	Not determined
Relative density:	Not determined
Solubility:	Not determined.
Partition coefficient: n-octanol/water:	Not determined
Auto-ignition (°C):	Not determined
Decomposition temperature (°C):	Not determined
Viscosity:	Not relevant
Explosive/oxidizing properties:	Not relevant
Purity :	>96% wt.

Other information:

None relevant.

10. STABILITY AND REACTIVITY

Reactivity:

No available information.

Chemical stability:

Stable under normal conditions. Combustible.

Possibility of hazardous reactions:

No known.

Conditions to avoid:

Strong heat, light and moisture.

Incompatible materials:

No known.

Hazardous decomposition products:

Combustion may produce oxides of carbon, nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

No toxicological data available.
Information on likely routes of exposure: Inhalation, skin and ingestion.
Symptoms: No toxicological data available.
Inhalation: No toxicological data available.
Skin: No toxicological data available.
Eyes: No toxicological data available.
Ingestion: No toxicological data available.

12. ECOLOGICAL INFORMATION

Toxicity:

No data available.

Persistence and degradability:

No data available.

Bioaccumulative potential:

No data available.

Mobility in soil:

No data available.

Results of PBT and vPvB assessment:

The substance is not considered PBT/vPvB according to criteria in Annex XIII.

Other adverse effects:

The environmental effects of the compound are sparsely described in literature.

13. DISPOSAL CONSIDERATIONS

Disposal should be according to Local, State and National Environmental Regulations. Dispose of through authorized facilities or pass on to chemical disposal company that can dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

14. TRANSPORT INFORMATION

DOT (US): Shipped under ambient temperature as non-hazardous chemical.

UN-no.:	UN proper shipping name:	Transport hazard class(es):	Packing group:
Not Available.	Not Available.	Not Available.	Not Available.

Environmental hazards: None.

Special precautions for user: None.

15. REGULATORY INFORMATION

Data not available

16. OTHER INFORMATION

The information presented herein is believed to be accurate and representative of currently accepted technical literature. However, PolyPeptide Laboratories does not mean to imply its completeness or comprehensiveness. Therefore, we suggest the use of this information solely as a guide in the use and handling of this product, and further urge the user to determine the suitability of this material for any particular purpose. PolyPeptide Laboratories shall not be held liable for any damages resulting from sole reliance on this information.

Labels according to GHS:

Warning

H302: Harmful if swallowed.

H373: May cause damage to organs through prolonged or repeated exposure.

P260: Do not breathe dust.

P280: Wear protective gloves/protective clothing/eye protection

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

Other hazards:

None known.

PPL-1190
Liraglutide

Hazard statements mentioned in section 2 and 3:

H302: Harmful if swallowed.

H373: May cause damage to organs through prolonged or repeated exposure.

May be harmful if swallowed, inhaled or absorbed through skin. May cause irritation to skin and eyes. The chemical, physical and toxicological properties of this product have not been thoroughly investigated. Exercise due care.

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

LD₅₀ = Lethal Dose 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Literature:

Training advice:

No special training is required. However, the user should be well instructed in the execution of his/her task, be familiar with this Safety Data Sheet and have normal training in the use of personal protective equipment.

NFPA: H - 1 F - 0 S - 0 O - ND
ND - Not Determined.

Additional information:

Changes since the previous edition: None