

SAFETY DATA SHEET

Safety data sheet according to (EC) No. 1907/2006.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier:

Somatostatin

CAS-no.: 51110-01-1

EC-no.: 254-186-5

INDEX-no.: None

REACH-REG.-no.: None.

1.2. Relevant identified uses of the substance or mixture and uses advised against:

For medical and veterinary research and/or commercial use. Restricted to professional users.

1.3. Details of the supplier of the safety data sheet:

Polypeptide Laboratories Pvt. Ltd.

Plot No. K-28,

Addl. MIDC, Phone: +91 251 3981900

Ambernath (E) Fax: +91 251 3981925

India.

1.4. Emergency telephone: +91 251 3981900

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

May cause serious damage to health by prolonged exposure or repeated exposure.

Somatostatin is an ergot-derived dopamine agonist.

Special caution should always be taken in the handling of biologically active material or materials similar to those CLP (1272/2008): STOT RE 2;H373

2.2. Label elements:

**WARNING**

Contains: Somatostatin acetate

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

P260: Do not breathe dust.

P314: Get medical advice/attention if you feel unwell.

2.3. Other hazards: None known.

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

SECTION 3: Composition/information on ingredients

3.1. Substances:

% w/w	Substance name	CAS-no.	EC-no.	Index-no.	REACH-reg.no.	Classification
> 99.3	Somatostatin	51110-01-1	254-186-5	-	-	STOT RE 2;H373

Wording of hazard statements – see section 16.

SECTION 4: First-aid measures

4.1. Description of first aid measures:

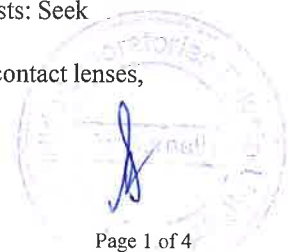
In case of a suspected somatostatin exposure: Avoid excessive drinking until it is obvious there are no signs of water retention.

Inhalation: Move the affected person to fresh air. Keep at rest. If needed: Seek medical advice.

Skin contact: Remove contaminated clothing and wash skin with water and mild soap. If irritation persists: Seek medical advice.

Eye contact: Flush with water or physiological salt water, holding eye lids open, remember to remove contact lenses, if any. If irritation persists: Seek medical advice.

Ingestion: Rinse mouth. Avoid drinking water. Do not induce vomiting. Seek medical advice



SECTION 4: First-aid measures

4.2. Most important symptoms and effects, both acute and delayed:

Obstipation, vomiting, headache, dizziness, hypotension, nasal congestion and orthostatic hypotension.

4.3. Indication of any immediate medical attention and special treatment needed:

Show this safety data sheet to a physician or emergency ward.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media:

Use water spray (never water jet), dry chemical, foam or carbon dioxide.

5.2. Special hazards arising from the substance or mixture:

Do not inhale smoke fumes. In case of fire, the product may form hazardous decomposition products such as oxides of carbon and nitrogen.

5.3. Advice for fire-fighters:

Use breathing apparatus with an independent source of air.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment - see section 8. Avoid generation of dust. Ventilate area of leak.

6.2. Environmental precautions:

Do not empty into drains – see section 12. Inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up:

Sweep up and place in a suitable container. Flush area of spill with plenty of water. Further handling of spillage - see section 13.

6.4. Reference to other sections:

See above.

SECTION 7: Handling and storage

7.1. Precautions for safe handling:

Do not open until use. Avoid contact with skin, eyes and clothing. Avoid generation of dust and spreading. Provide sufficient ventilation. Wash contaminated skin immediately with water and mild soap. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities:

Store in a tightly closed original container at $-20^{\circ}\pm 5^{\circ}\text{C}$ in dry place. Avoid exposure to light. In addition, see manufacturer's specifications.

7.3. Specific end use(s):

See section 1.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters:

Sweden: AFS 2015:7: None

UK: Occupational exposure limits (EH40/2005 with later amendments): None

DNEL/PNEC: No CSR.

8.2. Exposure controls:

Appropriate engineering controls: Provide adequate ventilation e.g. by working in a fume hood.

Personal protective equipment:

Respiratory protection: During all open handling use an approved mask (EN149) with a particle filter type P3. The filter has a limited lifetime and must be changed. Read the instruction.

Skin protection: Wear protective gloves (EN374) of e.g. nitrile rubber. It has not been possible to find any data for breakthrough time, so it is recommended to change the glove if spilled on.

Eye protection: Wear tightly fitting safety goggles (EN166) in case of risk of contact with the eyes

Environmental exposure controls: None particular.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties:

Appearance: White to off-white amorphous powder of low density

Odour: No available data

Odour threshold: No available data

pH (aqueous solution of 1 %): No available data

Melting point/freezing point (°C):	No available data
Initial boiling point and boiling range (°C):	Not applicable
Flash point (°C):	Not applicable
Evaporation rate:	Not applicable
Flammability (solid, gas):	No available data
Upper/lower flammability or explosive limits (vol.-%):	No available data
Vapour pressure:	Not applicable
Relative density:	No available data
Solubility (water):	Soluble
Partition coefficient: n-octanol/water:	No available data
Auto-ignition temperature (°C):	No available data
Decomposition temperature (°C):	No available data
Viscosity:	Not applicable
Explosive properties:	Dust may form explosive mixture with air.
Oxidising properties:	No available data
9.2. Other information:	None relevant

SECTION 10: Stability and reactivity

10.1. Reactivity:

No available information.

10.2. Chemical stability:

Stable under normal conditions - see section 7. Combustible.

10.3. Possibility of hazardous reactions:

None known.

10.4. Conditions to avoid:

Strong heat, light and moisture. Avoid generation of dust.

10.5. Incompatible materials:

None known.

10.6. Hazardous decomposition products:

When heated to high temperatures (decomposition) toxic fumes are emitted: oxides of carbon and nitrogen

SECTION 11: Toxicological information

11.1. Information on toxicological effects:

Hazard class	Data (Somatostatin)	Test	Data source
Acute toxicity:	LD ₅₀ (Intravenous, rat) = 21 mg/kg	No info	RTECS
Inhalation	No available/applicable data.	-	-
Dermal	No available/applicable data.	-	-
Oral	No available/applicable data.	-	-
Corrosion/irritation:	No available/applicable data.	-	-
Sensitization:	No available/applicable data.	-	-
CMR:	TDLo (subcutaneous, rat) = 19.6 mg/kg/49D pre-mating; "Maternal effects" and "Developmental abnormalities"	No info	RTECS

Information on likely routes of exposure: Inhalation, skin and ingestion.

Symptoms:

Inhalation: Somatostatin has a strong inhibitory effect on gastroenteropancreatic hormone secretion. Symptoms are mainly gastrointestinal and may include obstipation, vomiting and severe water retention.

Skin: May cause slight irritation.

Eyes: May cause irritation.

Ingestion: Ingestion may induce symptoms as described under "Inhalation".

Chronic effects: May cause serious damage to health. Somatostatin may inhibit a number of systems, including central and peripheral neural, gastrointestinal and vascular smooth muscle. Can in rare cases lead to dopamine dependency (also referred to as the dopaminergic dysregulation syndrome) or signs of ludomania, increased libido and hypersensitivity.

SECTION 12: Ecological information

12.1. Toxicity:

NOEC (Daphnia magna, 6D) = 0.1 mg/l (EPA Ecotox).

12.2. Persistence and degradability:

No available/applicable data.



12.3. Bioaccumulative potential:

No available/applicable data.

12.4. Mobility in soil:

No available/applicable data.

12.5. Results of PBT and vPvB assessment:

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

12.6. Other adverse effects:

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods:

Disposal should be according to local, state or national legislation. Dispose of through authority facilities or pass to chemical disposal company.

EWC-code: 07 05 99

SECTION 14: Transport information

Not hazardous for transportation (ADR/RID/IMDG/IATA)

14.1. UN-no.: None

14.2. UN proper shipping name: None

14.3. Transport hazard class(es): None

14.4. Packing group: None

14.5. Environmental hazards: None.

14.6. Special precautions for user: None.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code: Not relevant.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:

The employer shall assess the working conditions and, if there is any risk to the safety or health and any effects on the pregnancy or breastfeeding of workers, take the necessary measures to adjust the working conditions (Directive 92/85/EEC). Must not be used by persons under 18 years of age.

15.2. Chemical Safety Assessment: No CSR.

SECTION 16: Other information

Hazard statements mentioned in section 2 and 3:

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

Abbreviations:

CMR = Carcinogenicity, mutagenicity and reproductive toxicity.

CSR = Chemical Safety Report

DNEL = Derived No-Effect Level

EC₅₀ = Effect Concentration 50 %

FW = Freshwater

LC₅₀ = Lethal Concentration 50 %

LD₅₀ = Lethal Dose 50 %

PBT = Persistent, Bioaccumulative, Toxic

PNEC = Predicted No-Effect Concentration

vPvB = very Persistent, very Bioaccumulative

Literature:

ECHA = REACH Registration dossier from ECHA's homepage.

EPA Ecotox = Environmental Protection Agency

IUCLID = International Uniform Chemical Database Information

RTECS = Register of Toxic Effects of Chemical Substances

<http://pro.medicin.dk>

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.

Additional 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 stability of this material for any particular purpose. Polypeptide laboratories shall not be held liable for any damages resulting from sole reliance on this information
