

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:

Gonadorelin Acetate

CAS-no.: 34973-08-5 EC-no.: 683-628-3 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 AB

Högerudsgatan 21, PO Box 30089 Phone: +46 (0) 40 36 62 00 SE-200 61 Limhamn Fax: +46 (0) 40 36 63 86

Sweden

Responsible person for the safety data sheet (e-mail): ppl@polypeptide.com

1.4. Emergency telephone:

Sweden: Acute: 112 - Ask for the Poison Information Centre. In less acute cases: 010 4566700 (Direct Numbers to the

Poison Information Centre).

UK: NHS (England or Wales): Dial 111 or 0845 4647 NHS 24 (Scotland): Dial 111

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture:

Harmful substance that may cause sensitization by inhalation and skin contact.

Gonadorelin acetate is a synthetic form of GnRH (hypothalamic gonadotropin-releasing hormone in man).

Gonadotropins has several effects on the gonads. May impair fertility and the unborn child.

Special caution should always be taken in the handling of biologically active material or materials similar to those.

CLP (1272/2008): Skin Sens. 1;H317 Acute Tox. 4;H332 Resp. Sens. 1;H334

2.2. Label elements:



Contains: Gonadorelin acetate

H317: May cause an allergic skin reaction.

H332: Harmful if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

DANGER

P260: Do not breathe dust.

P280: Wear protective gloves/eye protection/face protection.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P342+P311: If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

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

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

2.3. Other hazards: None known.

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

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SECTION 3: Composition/information on ingredients

3.1. Substances:

% w/w Substance name CAS EC-no. Index-no. REACH reg.no. Classification 88-98 Gonadorelin acetate 34973-08-5 683-628-3 - Skin Sens. 1:H317

Acute Tox. 4;H332 Resp. Sens. 1;H334

Wording of hazard statements - see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures:

Inhalation: Move the affected person to fresh air. Keep at rest. 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 and drink plenty of water. Seek medical advice

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

May cause asthma symptoms and allergic skin reaction. Bone pain, headache and gastro-intestinal disturbances.

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: Carbon- and nitrogen oxides.

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:

Avoid breathing dust. Provide adequate ventilation e.g. by working in a fumehood. Do not open until use. Avoid contact with skin, eyes and clothing. Avoid generation of dust and spreading. Wash contaminated skin immediately with water and mild soap. Change contaminated clothing immediately. Take precautionary measures against static discharges. Required

7.2. Conditions for safe storage, including any incompatibilities:

Store in a tightly closed original container at 2-8°C in a dry and well-ventilated place. Avoid exposure to light. In, addition see manufacturer's specifications.

Store securely and

7.3. Specific end use(s):

See section 1.

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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 fumehood.

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 or slightly yellowish powder

Odour: None

Odour threshold: No available data pH (aqueous solution): 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:

Auto-ignition temperature (°C):

Decomposition temperature (°C):

Viscosity:

No available data

No available data

No available data

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. Decomposes slowly in aqueous solutions. Combustible.

10.3. Possibility of hazardous reactions:

Dust may form explosive mixture with air.

10.4. Conditions to avoid:

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

10.5. Incompatible materials:

Bases and strong acids.

10.6. Hazardous decomposition products:

When heated to high temperatures (decomposition) toxic fumes are emitted: Carbon- and nitrogen oxides.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects:

Hazard class	Data	Test	Data source
Acute toxicity:			
Inhalation	No available/applicable data.	-	-
Dermal	No available/applicable data.	-	-
Oral	LD_{50} (rat) = >3000 mg/kg (gonadorelin acetate)	No info	RTECS
Corrosion/irritation:	No available/applicable data.	-	-
Sensitization:	No available/applicable data.	-	=
CMR:	TD_{Lo} (female rats, i.v.) = 0.54 mg/kg, 17-22D after conception;	No info	RTECS
	"Effects on newborn" (Gonadorelin diacetate)		
	TD_{Lo} (female rats, i.v.) = 26 mg/kg, 6-18D after conception;	No info	RTECS
	Maternal/reproductive effects/fertility" (Gonadorelin diacetate)		

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

Symptoms:

Inhalation: Harmful by inhalation. Inhalation of dust has several effects on the gonads. Symptoms may include

bone pain, headache, gastro-intestinal disturbances, ovulation, increased menstrual bleeding and hot

flushes.

Skin: May cause irritation.

Eyes: May cause irritation.

Ingestion: See under "Inhalation"

Chronic effects: Gonadotropins may impair fertility and the unborn child. It may cause changes in sex hormones,

reduced libido and abortion. Gonadorelin is also found to cause osteoporosis. Peptides may cause potential antigenicity and allergic reactions. Special caution should always be taken in the handling of

polypeptides with hormone-like effects.

SECTION 12: Ecological information

12.1. Toxicity:

No available/applicable data.

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.

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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.

Please contact national authorities regarding notification and use of the substance (Directive 2001/82/EC). Gonadorelin is on WADA's list of prohibited doping substances (The World Anti-Doping Code): Group S2, PEPTIDE HORMONES, GROWTH FACTORS, RELATED SUBSTANCES, AND MIMETICS; Chorionic Gonadotrophin (CG) and Luteinizing Hormone (LH) and their releasing factors.

15.2. Chemical Safety Assessment:

No CSR.

SECTION 16: Other information

Hazard statements mentioned in section 2 and 3:

H317: May cause an allergic skin reaction.

H332: Harmful if inhaled.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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 %

 LD_{50} = 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:

Prepared based on the information available to Altox A/S October 2017

Changes since the previous edition:

Section 2 and 3. Minor changes in section 1-16

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