

PRODUCT AND COMPANY IDENTIFICATION

GHS Product Name: Letrozole

Product code: h-309 Company: PharmSintez.Lab

Address: Skolkovo Nobel street, 5, Lab. 3a, 09. 556. Moscow, Russia

Tel: +7 (495) 796-94-33 Fax: +7 (495) 796-94-33 Email: info@labphs.com

1.1 Product identifiers

Product name:	Letrozole
Product Catalogue Number:	h-309
Band:	PharmSintez.Lab
CAS-No:	112809-51-5

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

	-
Identified uses:	Laboratory chemicals, Synthesis of substances,

1. HAZARDS IDENTIFICATION

1.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2), H315

Serious eve damage (Category 1), H318

Respiratory sensitisation (Category 1), H334

Skin sensitisation (Category 1), H317

Germ cell mutagenicity (Category 2), H341

Reproductive toxicity (Category 2), H361

Specific target organ toxicity - single exposure (Category 1), H370

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

Chronic aquatic toxicity (Category 4), H413

For the full text of the H-Statements mentioned in this Section, see Section 16.

1.2 GHS Label elements, including precautionary statements

Pictogram:



Signal word:

Danger

Hazard statement(s)

H315: Causes skin irritation.

H317: May cause an allergic skin reaction Causes serious eye damage. H318:

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

May cause respiratory irritation. H335: Suspected of causing genetic defects. H341:

Suspected of damaging fertility or the unborn child. H361:

Causes damage to organs. H370:

May cause long lasting harmful effects to aquatic life. H413:

Precautionary statement(s)

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P260: Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264: Wash skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product. P271: Use only outdoors or in a well-ventilated area.

P272: Contaminated work clothing should not be allowed out of the workplace.

P273: Avoid release to the environment.

P280: Wear protective gloves/ eye protection/ face protection. P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable

for breathing.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER/doctor.

P321: Specific treatment (see supplemental first aid instructions on this label).

P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention.
P362: Take off contaminated clothing and wash before reuse.
P403 + P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

P501: Dispose of contents/ container to an approved waste disposal plant.

1.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Substances

Synonyms: CGS20267; CGS-20267; CGS 20267; Abbreviation: LTZ. Brand name:

Femara; Letoval.

Formula: $C_{17}H_{11}N_5$ Molecular weight: 285.30 CAS-No: 112809-51-5

Hazardous components

Component	Classification	Concentration
Letrozole	Skin Irrit. 2; Eye Dam. 1; Resp. Sens. 1; Skin Sens. 1; Muta. 2; Repr. 2; STOT SE 3; Aquatic Chronic 4; H315, H317, H318, H334, H335, H341, H361, H413	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

3. FIRST AID MEASURES

3.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

3.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Pharm Sintez.Lab Cat# h-309 Page 2 of 8

Indication of any immediate medical attention and special treatment needed No data available

4. FIREFIGHTING MEASURES

4.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

4.2 Special hazards arising from the substance or mixture

No data available

4.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

4.4 Further information

No data available

4.5

4.6 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

4.7 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

4.8 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

4.9 Reference to other sections

For disposal see section 13.

5. HANDLING AND STORAGE

5.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

5.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C for short term (weeks to 3 months) or -20°C for long term (3 months to years).

Keep in a dry place.

5.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

6. EXPOSURE CONTROLS/PERSONAL PROTECTION

6.1 Control parameters

Components with workplace control parameters

Pharm Sintez.Lab Cat# h-309 Page 3 of 8

Component	CAS-No.	Value	Control parameters	Basis
Letrozole	112809-51-5	N/A	N/A	N/A

6.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

7. PHYSICAL AND CHEMICAL PROPERTIES

7.1 Information on basic physical and chemical properties

a) Appearance Form: Color: white to off-white

Form: Solid powder

Pharm Sintez.Lab Cat# h-309 Page 4 of 8

e) Melting point/freezing point

f) Initial boiling point and boiling range

No data available No data available

g) Flash point
No data available
No data available
i) Flammability (solid, gas)
No data available

j) Upper/lower flammability or explosive limits

k)

No data available Vapour pressure No data available

I) Vapour density

No data available

m) Relative density

No data available

n) Water solubility Insoluble

o) Partition coefficient: noctanol/ water

log Pow: > 99Auto-ignition temperature No data

available

p) Decomposition temperature No data available q) Viscosity No data available r) Explosive properties No data available s) Oxidizing properties No data available

7.2 Other safety information

No data available

8. STABILITY AND REACTIVITY

8.1 Reactivity: No data available

8.2 Chemical stability: Stable under recommended storage conditions.

8.3 Possibility of hazardous reactions: No data available

8.4 Conditions to avoid: No data available

8.5 Incompatible materials: No data available

8.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

Other decomposition products - No data available

In the event of fire: see section 5

9. TOXICOLOGICAL INFORMATION

9.1 Information on toxicological effects

Acute toxicityInhalation:
No data available
No data available

Inhalation: Irritating to respiratory system.

Dermal No data available

Skin corrosion/irritation: No data available

Serious eye damage/eye irritation: No data available

Respiratory or skin sensitisation

Pharm Sintez.Lab Cat# h-309 Page 5 of 8

Germ cell mutagenicity: No data available

Hamster: No data available

Lungs: No data available Cytogenetic analysis: No data available Mouse: No

data available

Micronucleus test: No data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable,

possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known

or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Reproductive toxicity - Rat - No data available

Maternal Effects: No data available

Reproductive toxicity - Rat - No data available

Effects on Newborn: No data available Developmental Toxicity - Rat - No data

available

Specific Developmental Abnormalities: No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

Additional Information

RTECS: DA8340700

Alopecia., Liver injury may occur., Kidney injury may occur., Nausea, Headache, Vomiting, bone marrow depression

Stomach - Irregularities - No data available Central nervous system - No data available Kidney - Irregularities - No data available Heart - Irregularities - No data available Stomach - Irregularities - No data available Stomach - Irregularities - No data available Kidney - Irregularities - No data available Stomach - Irregularities - No data available

10. ECOLOGICAL INFORMATION

10.1 Toxicity: No data available

10.2 Persistence and degradability: No data available

10.3 Bioaccumulative potential: No data available

10.4 Mobility in soil: No data available

10.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

10.6 Other adverse effects: No data available

Pharm Sintez.Lab Cat# h-309

11. DISPOSAL CONSIDERATIONS

11.1 Waste treatment

methods Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

12. TRANSPORT INFORMATION

DOT (US): Not dangerous goods **IMDG:** Not dangerous goods **IATA:** Not dangerous goods

13. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity
Aquatic Chronic Chronic aquatic
toxicity Eye Dam. Serious eye damage
Eye Irrit. Eye irritation

Flam. Liq. Flammable liquids

H225 Highly flammable liquid and vapour. H301 + H311 + H331 Toxic if swallowed, in contact with skin or if

inhaled H315 Causes skin irritation.

H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.

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

H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H341 Suspected of causing genetic defects.

H361 Suspected of damaging fertility or the unborn child.

H370 Causes damage to organs.

H413 May cause long lasting harmful effects to aquatic life.

Muta.Germ cell mutagenicityRepr.Reproductive toxicityResp. Sens.Respiratory sensitisation

Skin Irrit. Skin irritation
Skin Sens. Skin sensitisation

STOT SE Specific target organ toxicity - single exposure

HMIS Rating

Health hazard: 2

Chronic Health Hazard: *

Flammability: 0

Pharm Sintez.Lab Cat# h-309 Page 7 of 8

Physical Hazard 0

NFPA Rating

Health hazard: 2 Fire Hazard: 0 Reactivity Hazard: 0

Further information

Copyright: Pharm Sintez.lab. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Pharm Sintez.lab and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.labphs.com for additional terms and conditions of sale.

Preparation Information

Pharm Sintez.lab Tel: 919-636-5577

Version: 2.1 Revision Date: 12/09/2016 Print Date: 12/09/2016

---End of document ----

Pharm Sintez.Lab Cat# h-309 Page 8 of 8