according to the Hazardous Products Regulations



# **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 3.9 09/26/2023 22196-00022 Date of first issue: 10/15/2014

### **SECTION 1. IDENTIFICATION**

Product name : Ganirelix Formulation Other means of identification : No data available

## Manufacturer or supplier's details

Company name of supplier : Organon & Co.

Address : 30 Hudson Street, 33nd floor

Jersey City, New Jersey, U.S.A 07302

Telephone : 1-551-430-6000 Emergency telephone : 1-215-631-6999

E-mail address : EHSSTEWARD@organon.com

# Recommended use of the chemical and restrictions on use

Recommended use : Pharmaceutical Restrictions on use : Not applicable

#### **SECTION 2. HAZARDS IDENTIFICATION**

### GHS classification in accordance with the Hazardous Products Regulations

Reproductive toxicity : Category 1B

Specific target organ toxicity

- repeated exposure

: Category 1 (Bone marrow, Liver, Adrenal gland, spleen, Ovary)

#### **GHS** label elements

Hazard pictograms :



Signal Word : Danger

Hazard Statements : H360Fd May damage fertility. Suspected of damaging the un-

born child

H372 Causes damage to organs (Bone marrow, Liver, Adrenal gland, spleen, Ovary) through prolonged or repeated exposure.

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P260 Do not breathe mist or vapors. P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves, protective clothing, eye protection

and face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical attention.

according to the Hazardous Products Regulations



# **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 09/26/2023 22196-00022 Date of first issue: 10/15/2014 3.9

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents and container to an approved waste

disposal plant.

Other hazards

None known.

#### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

# Components

Chemical name	Common CAS-No.		Concentration (% w/w)	
	Name/Synonym			
Ganirelix	No data availa- ble	124904-93-4	>= 0.01 - < 0.1 *	
	DIE			

Actual concentration or concentration range is withheld as a trade secret

#### **SECTION 4. FIRST AID MEASURES**

General advice In the case of accident or if you feel unwell, seek medical

advice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled If inhaled, remove to fresh air.

Get medical attention.

In case of skin contact In case of contact, immediately flush skin with soap and plenty

of water.

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse. Flush eyes with water as a precaution.

Get medical attention if irritation develops and persists.

If swallowed If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and May damage fertility. Suspected of damaging the unborn

child.

delayed

In case of eye contact

Causes damage to organs through prolonged or repeated

exposure.

Protection of first-aiders First Aid responders should pay attention to self-protection,

> and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

: Treat symptomatically and supportively. Notes to physician

#### **SECTION 5. FIRE-FIGHTING MEASURES**

according to the Hazardous Products Regulations



# **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 09/26/2023 22196-00022 Date of first issue: 10/15/2014 3.9

Suitable extinguishing media Water spray

> Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

Specific hazards during fire

fighting

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucts

No hazardous combustion products are known

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO

Evacuate area.

Special protective equipment:

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

#### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec: :

tive equipment and emer-

gency procedures

Use personal protective equipment.

Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

Environmental precautions Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

Prevent spreading over a wide area (e.g., by containment or

oil barriers).

Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up Soak up with inert absorbent material.

For large spills, provide diking or other appropriate

containment to keep material from spreading. If diked material

can be pumped, store recovered material in appropriate

container.

Clean up remaining materials from spill with suitable

absorbent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items

employed in the cleanup of releases. You will need to

determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

#### **SECTION 7. HANDLING AND STORAGE**

Technical measures See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

If sufficient ventilation is unavailable, use with local exhaust Local/Total ventilation

according to the Hazardous Products Regulations



# **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 3.9 09/26/2023 22196-00022 Date of first issue: 10/15/2014

ventilation.

Advice on safe handling : Do not get on skin or clothing.

Do not breathe mist or vapors.

Do not swallow.

Avoid contact with eyes.

Wash skin thoroughly after handling.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure

assessment

Keep container tightly closed.

Do not eat, drink or smoke when using this product.

Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage : Keep in properly labeled containers.

Store locked up. Keep tightly closed.

Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:

Strong oxidizing agents

Self-reactive substances and mixtures

Organic peroxides

Explosives Gases

## **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Ganirelix	124904-93-4	TWA	0.2 μg/m3 (OEB 5)	Internal
		Wipe limit	2 μg/100 cm <sup>2</sup>	Internal

**Engineering measures** : Use closed processing systems or containment technologies

to control at source (e.g., glove boxes/isolators) and to prevent leakage of compounds into the workplace.

All engineering controls should be implemented by facility design and operated in accordance with GMP principles to

protect products, workers, and the environment.

No open handling permitted.

Totally enclosed processes and materials transport systems

are required.

Operations require the use of appropriate containment technology designed to prevent leakage of compounds into

the workplace.

Personal protective equipment

Respiratory protection : No personal respiratory protective equipment normally

required.

Hand protection

according to the Hazardous Products Regulations



# **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 3.9 09/26/2023 22196-00022 Date of first issue: 10/15/2014

Material : Chemical-resistant gloves

Remarks : Consider double gloving.

Eye protection : Wear safety glasses with side shields or goggles.

If the work environment or activity involves dusty conditions,

mists or aerosols, wear the appropriate goggles.

Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or

aerosols.

Skin and body protection : Work uniform or laboratory coat.

Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable suits) to avoid exposed skin surfaces.

Use appropriate degowning techniques to remove potentially

contaminated clothing.

Hygiene measures : If exposure to chemical is likely during typical use, provide

eye flushing systems and safety showers close to the

working place.

When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures, industrial hygiene monitoring, medical surveillance and the

use of administrative controls.

# **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : Aqueous solution

Color : No data available

Odor : No data available

Odor Threshold : No data available

pH : 5

Melting point/freezing point : No data available

Initial boiling point and boiling :

range

100 °C

Flash point : No data available

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Flammability (liquids) : No data available

Upper explosion limit / Upper

flammability limit

No data available

according to the Hazardous Products Regulations



# **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 3.9 09/26/2023 22196-00022 Date of first issue: 10/15/2014

Lower explosion limit / Lower

flammability limit

No data available

Vapor pressure : 23 hPa (20 °C)

Relative vapor density : No data available

Relative density : 1

Solubility(ies)

Water solubility : completely miscible

Partition coefficient: n-

octanol/water

No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available

Particle size : No data available

### **SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Not classified as a reactivity hazard. Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

Can react with strong oxidizing agents.

Conditions to avoid : None known.
Incompatible materials : Oxidizing agents

Hazardous decomposition : No hazardous decomposition

products

: No hazardous decomposition products are known.

### **SECTION 11. TOXICOLOGICAL INFORMATION**

### Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

### **Acute toxicity**

Not classified based on available information.

according to the Hazardous Products Regulations



# **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 3.9 09/26/2023 22196-00022 Date of first issue: 10/15/2014

#### **Components:**

#### **Ganirelix:**

Acute toxicity (other routes of : LD50 (Rat): 40 mg/kg

administration)

#### Skin corrosion/irritation

Not classified based on available information.

### Serious eye damage/eye irritation

Not classified based on available information.

### **Components:**

#### Ganirelix:

Species : Rabbit

Result : Mild eye irritation Method : Draize Test

## Respiratory or skin sensitization

## Skin sensitization

Not classified based on available information.

# Respiratory sensitization

Not classified based on available information.

### **Components:**

#### Ganirelix:

Test Type : Maximization Test
Species : Guinea pig
Result : negative

# Germ cell mutagenicity

Not classified based on available information.

### **Components:**

#### **Ganirelix:**

Genotoxicity in vitro : Test Type: reverse mutation assay

Test system: Salmonella typhimurium

Result: negative

Test Type: reverse mutation assay Test system: Escherichia coli

Result: negative

Test Type: in vitro test

Test system: Chinese hamster ovary cells

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Species: Mouse

Application Route: Intravenous

according to the Hazardous Products Regulations



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Version Revision Date: SDS Number: Date of last issue: 03/20/2023 3.9 09/26/2023 22196-00022 Date of first issue: 10/15/2014

Result: negative

Germ cell mutagenicity -

Assessment

Weight of evidence does not support classification as a germ

cell mutagen.

### Carcinogenicity

Not classified based on available information.

# Reproductive toxicity

May damage fertility. Suspected of damaging the unborn child.

## **Components:**

#### **Ganirelix:**

Effects on fertility : Test Type: Fertility/early embryonic development

Species: Rat

Application Route: Subcutaneous Duration of Single Treatment: 13 Weeks

Fertility: LOAEL: 0.1 µg/kg Result: Effects on fertility.

Test Type: Fertility/early embryonic development

Species: Rat, female

Application Route: Subcutaneous Duration of Single Treatment: 8 Weeks

Fertility: LOAEL: 10 µg/kg

Result: No effects on mating performance., Effects on fertility.

Test Type: Fertility Species: Monkey

Application Route: Subcutaneous

Fertility: NOAEL: 0.02 mg/kg body weight

Result: Effects on fertility.

Effects on fetal development : Test Type: Embryo-fetal development

Species: Rat, female

Application Route: Subcutaneous Embryo-fetal toxicity.: LOAEL: 10 µg/kg

Result: Embryo-fetal toxicity.

Test Type: Embryo-fetal development

Species: Rabbit, female

Application Route: Subcutaneous Embryo-fetal toxicity.: LOAEL: 30 μg/kg

Result: Embryo-fetal toxicity.

Reproductive toxicity - As-

sessment

Clear evidence of adverse effects on sexual function and fertility, based on animal experiments., Some evidence of

adverse effects on development, based on animal

experiments.

### STOT-single exposure

Not classified based on available information.

according to the Hazardous Products Regulations



## **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 3.9 09/26/2023 22196-00022 Date of first issue: 10/15/2014

# STOT-repeated exposure

Causes damage to organs (Bone marrow, Liver, Adrenal gland, spleen, Ovary) through prolonged or repeated exposure.

### **Components:**

#### **Ganirelix:**

Routes of exposure : Ingestion

Target Organs : Bone marrow, Liver, Adrenal gland, spleen, Ovary

Assessment : Causes damage to organs through prolonged or repeated

exposure.

### Repeated dose toxicity

#### **Components:**

### Ganirelix:

Species : Rat

NOAEL : 0.02 mg/kg
LOAEL : 2 mg/kg
Application Route : Subcutaneous
Exposure time : 6 Months
Target Organs : Bone marrow

Species : Mouse, female
LOAEL : 0.3 mg/kg
Application Route : Subcutaneous
Exposure time : 3 Months

Target Organs : Liver, Adrenal gland, spleen, Ovary

Species : Mouse, male
LOAEL : 3 mg/kg
Application Route : Subcutaneous
Exposure time : 3 Months

Target Organs : Liver, Adrenal gland, spleen

Species : Monkey
NOAEL : 2.5 mg/kg
Application Route : Subcutaneous
Exposure time : 6 Months

Remarks : No significant adverse effects were reported

#### **Aspiration toxicity**

Not classified based on available information.

#### **Experience with human exposure**

#### Components:

### Ganirelix:

Inhalation : Symptoms: The most common side effects are:, vaginal

bleeding, Headache, Abdominal pain, Nausea, ectopic preg-

nancy, miscarriage

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## **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 3.9 09/26/2023 22196-00022 Date of first issue: 10/15/2014

#### **SECTION 12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

### Components:

#### **Ganirelix:**

### **Ecotoxicology Assessment**

Acute aquatic toxicity : No data available

Chronic aquatic toxicity : No data available

### Persistence and degradability

No data available

## **Bioaccumulative potential**

No data available

### Mobility in soil

No data available

### Other adverse effects

No data available

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

### **Disposal methods**

Waste from residues : Do not dispose of waste into sewer.

Dispose of in accordance with local regulations.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

### **SECTION 14. TRANSPORT INFORMATION**

### International Regulations

### **UNRTDG**

Not regulated as a dangerous good

### IATA-DGR

Not regulated as a dangerous good

### **IMDG-Code**

Not regulated as a dangerous good

# Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

### **Domestic regulation**

#### TDG

Not regulated as a dangerous good

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## **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 09/26/2023 22196-00022 Date of first issue: 10/15/2014 3.9

### Special precautions for user

Not applicable

#### **SECTION 15. REGULATORY INFORMATION**

The ingredients of this product are reported in the following inventories:

**AICS** not determined

DSL not determined

**IECSC** not determined

#### **SECTION 16. OTHER INFORMATION**

#### Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant: DIN - Standard of the German Institute for Standardisation: DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

compile the Material Safety

Sources of key data used to : Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

according to the Hazardous Products Regulations



# **Ganirelix Formulation**

Version Revision Date: SDS Number: Date of last issue: 03/20/2023 3.9 09/26/2023 22196-00022 Date of first issue: 10/15/2014

Data Sheet cy, http://echa.europa.eu/

Revision Date : 09/26/2023 Date format : mm/dd/yyyy

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

CA / Z8