

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

1.1. Product identifier

Product form	: Tablet
Product name	: Vagifem®
Formula	: C ₁₈ H ₂₄ O ₂ , ½ H ₂ O
Other means of identification	: Vagifem® 10 mcg Vagifem® 25 mcg

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

Use of the substance/mixture	: Drug Product
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1.3. Details of the supplier of the safety data sheet

Novo Nordisk
800 Scudders Mill Road
Plainsboro, NJ 08536
T 800-727-6500
www.novonordisk-us.com

1.4. Emergency telephone number

Emergency number	: 800-727-6500
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Skin Sens. 1	H317
Carc. 2	H351
Repr. 1A	H360

2.2. Label elements

GHS-US labelling

Hazard pictograms (GHS-US)



Signal word (GHS-US)

: Danger

Hazard statements (GHS-US)

: H317 - May cause an allergic skin reaction
H351 - Suspected of causing cancer (Dermal, Inhalation, oral)
H360 - May damage fertility or the unborn child

Precautionary statements (GHS-US)

: P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P261 - Avoid breathing dust
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear appropriate PPE
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P308+P313 - IF exposed or concerned: Get medical advice/attention
P321 - Specific treatment (see See Section 4 on this label)
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P405 - Store locked up
P501 - Dispose of contents/container to comply with local/regional/national/international regulations

2.3. Other hazards

Other hazards not contributing to the classification

: Inactive ingredients include: hypromellose, lactose monohydrate, maize starch and magnesium stearate. The film coating contains hypromellose and polyethylene glycol.

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2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Estradiol 10 or 25 micrograms (active ingredient) 3,17β-Dihydroxy-1,3,5(10)-estratriene 1,3,5-Estratriene-3,17β-diol Dihydrofolliculin 17β-Estradiol	(CAS No) 50-28-2	0.06	Skin Sens. 1, H317 Carc. 2, H351 Repr. 1A, H360

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
- First-aid measures after inhalation : Not an anticipated route of entry. If inhaled, remove person to fresh air.
- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
- First-aid measures after ingestion : Not an anticipated route of entry. Rinse mouth thoroughly and then drink plenty of water. Do not induce vomiting. Seek medical advice in case of persistent discomfort.

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

- Symptoms/injuries after inhalation : Inhalation of dust may cause irritation to the upper airways. Vagifem® may be absorbed by inhalation.
- Symptoms/injuries after skin contact : May cause irritation by the active substance or any of the excipients. Systemic absorption occurs with the use of Vagifem. The warnings, precautions, and adverse reactions associated with the use of systemic estrogen therapy should be taken into account. Estrogen-induced hypocalcemia may occur. May cause diarrhea, CNS depression, and migraines.
- Symptoms/injuries after eye contact : May cause irritation. Avoid contact with the eyes.
- Symptoms/injuries after ingestion : Vagifem® is intended only for vaginal administration. Systemic absorption occurs with the use of Vagifem. The warnings, precautions, and adverse reactions associated with the use of systemic estrogen therapy should be taken into account. Ingestion of may cause discomfort.
- Chronic symptoms : Estrogen therapy may cause an exacerbation of asthma, diabetes mellitus, epilepsy, migraine, porphyria, systemic lupus erythematosus, and hepatic hemangiomas.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Any. Use media appropriate for surrounding fire.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not flammable.
- Reactivity : Not reactive under normal use and conditions.

5.3. Advice for firefighters

- Protection during firefighting : Positive pressure self-contained breathing apparatus (SCBA) and structural firefighters' protective clothing will provide adequate protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Seek fresh air.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

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6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

6.2. Environmental precautions

Under normal use, this product is not expected to impact the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Do not touch or walk through spilled material.

Methods for cleaning up : HEPA Vacuum or wet methods and place in a disposal container.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required.

Hygiene measures : Do not eat, drink or smoke when using this product. Practice good housekeeping. Wash thoroughly after handling. Change contaminated clothing. Do not reuse until laundered.

7.2. Conditions for safe storage, including any incompatibilities

Storage temperature : Store at 25°C (77 °F). Excursions permitted to 15°C to 30°C (59°F to 86°F). Do not refrigerate.

7.3. Specific end use(s)

Drug Product.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Contains no substances subject to reporting requirements.

8.2. Exposure controls

Appropriate engineering controls : Work must be done with effective mechanical ventilation. There must be access to running water and eye wash.

Personal protective equipment : Avoid all unnecessary exposure.

Hand protection : Polyvinylchloride (PVC) /Nitrile rubber gloves.

Eye protection : Eye protection such as chemical splash goggles and/or face shield must be worn when possibility exists for eye contact due to splashing or spraying liquid. Contact lenses should not be worn.

Skin and body protection : PVC gloves, nitrile rubber or similar protection are recommended for waste clear-up and manufacturing operations.

Respiratory protection : Not normally required. If the tablets crushed and dust is released personal protection (breathing protection (filtertype P3) must be used.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Appearance : Small, white, film-coated tablets.

Molecular mass : 281.4 g/mol

Color : White.

Odor : Cresol.

Odor threshold : No data available

pH : No data available

pH solution : 7.4 (at 20 °C)

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 173 - 179 °C

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapor pressure : No data available

Relative vapor density at 20 °C : No data available

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Relative density	: 1.005 g/ml (at 25 °C)
Solubility	: Soluble.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not reactive under normal use and conditions.

10.2. Chemical stability

Product is stable.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No known incompatibilities.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

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Additional information	Hypersensitivity to the active substance or to any of the excipients. Postmarketing studies have indicated the following adverse skin reactions: Urticaria, erythematous or pruritic rash, genital pruritus.

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, uterus, cervix, vagina, testis, and liver.

Vagifem®	
Additional information	Long-term continuous administration of natural and synthetic estrogens in certain animal species increases the frequency of carcinomas of the breast, uterus, cervix, vagina, testis, and liver.

Reproductive toxicity	: May damage fertility or the unborn child. Maternal ingestion of diethylstilbestrol (DES) during early pregnancy increases the risk of vaginal adenocarcinoma and the incidence of epididymal cysts, maldescended testes, hypoplastic testes, varicoceles, spermatozoal defects, and perhaps seminoma, in the exposed offspring many years later. May cause gynecomastia in exposed males.
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified

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Additional information	An increased risk of stroke and deep vein thrombosis (DVT) has been reported with estrogen-alone therapy. An increased risk of probable dementia, DVT, stroke, and myocardial infarction has been reported with estrogen plus progestin therapy.
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: Inhalation of dust may cause irritation to the upper airways. Vagifem® may be absorbed by inhalation.
Symptoms/injuries after skin contact	: May cause irritation by the active substance or any of the excipients. Systemic absorption occurs with the use of Vagifem. The warnings, precautions, and adverse reactions associated with the use of systemic estrogen therapy should be taken into account. Estrogen-induced hypocalcemia may occur. May cause diarrhea, CNS depression, and migraines.
Symptoms/injuries after eye contact	: May cause irritation. Avoid contact with the eyes.
Symptoms/injuries after ingestion	: Vagifem® is intended only for vaginal administration. Systemic absorption occurs with the use of Vagifem. The warnings, precautions, and adverse reactions associated with the use of systemic estrogen therapy should be taken into account. Ingestion of may cause discomfort.
Chronic symptoms	: Estrogen therapy may cause an exacerbation of asthma, diabetes mellitus, epilepsy, migraine, porphyria, systemic lupus erythematosus, and hepatic hemangiomas.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Avoid discharge to drain or surface water.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Contains constituents with the potential to bioaccumulate.

12.4. Mobility in soil

Expected to be immobile in soil.

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : The product is not hazardous waste. Dispose in a safe manner in accordance with local/national regulations.

SECTION 14: Transport information

In accordance with DOT

Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

Transport document description :

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Estradiol 10 or 25 micrograms (active ingredient) 3,17β-Dihydroxy-1,3,5(10)-estratriene 1,3,5-Estratriene-3,17β-diol Dihydrofolliculin 17β-Estradiol (50-28-2)

Not listed on the United States TSCA (Toxic Substances Control Act) inventory

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15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

No additional information available

15.3. US State regulations

Estradiol 10 or 25 micrograms (active ingredient) 3,17β-Dihydroxy-1,3,5(10)-estratriene 1,3,5-Estratriene-3,17β-diol Dihydrofolliculin 17β-Estradiol (50-28-2)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes				

Estradiol 10 or 25 micrograms (active ingredient) 3,17β-Dihydroxy-1,3,5(10)-estratriene 1,3,5-Estratriene-3,17β-diol Dihydrofolliculin 17β-Estradiol (50-28-2)
U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances

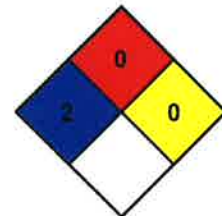
SECTION 16: Other information

- Data sources : Novo Nordisk Medical Information for Health Care Professionals. [<http://www.novonordiskmedicalinformation.com/products.aspx>], U.S. National Library of Medicine: DAILY MED [<http://dailymed.nlm.nih.gov/dailymed/index.cfm>].
- Training advice : No special training is necessary but a thorough knowledge of this safety data sheet is assumed.

Full text of H-phrases: see section 16:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Carc. 2	Carcinogenicity, Category 2
Skin Sens. 1	Sensitization — Skin, category 1
H302	Harmful if swallowed
H317	May cause an allergic skin reaction
H351	Suspected of causing cancer
H360	May damage fertility or the unborn child

- NFPA health hazard : 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
- NFPA fire hazard : 0 - Materials that will not burn.
- NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product