

## 17 $\alpha$ -Ethinylestradiol-2,4,16,16-d<sub>4</sub>

### Section 1. Chemical product and company identifications

**Product code:** D-4319

**Chemical formula:** C<sub>20</sub>H<sub>20</sub>D<sub>4</sub>O<sub>2</sub>

**CAS:** 350820-06-3

**CAS (unlabelled):** 57-63-6

**Synonyms:** 17 $\alpha$ -Ethinyl-1,3,5(10)-estratriene-3,17 $\beta$ -diol, 19-Nor-1,3,5(10),17 $\alpha$ -pregnatrien-20-yne-3,17-diol

**Supplier / Manufacturer:**

**C/D/N Isotopes Inc.**

88 Leacock Street

Pointe-Claire (Québec) H9R 1H1

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Toll-Free (Canada & USA): 1-800-565-4696

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Website: www.cdnisotopes.com



**In case of emergency:**

**TOXYSCAN HOTLINE: 1-855-780-0599**

### Section 2. Hazards identifications

**GHS (Globally Harmonized System of Classification and Labelling of Chemicals):**

**GHS Classification:** - Acute toxicity, Oral (Category 4)  
- Carcinogenicity (Category 1B)

**GHS Label elements:** - Pictograms:    
- Signal word: Danger

**Hazards statement:** - H302 Harmful if swallowed.  
- H350 May cause cancer.

**Precautionary statement:** - P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
- P317 Get medical help.

### Section 3. Composition and information on ingredients

<u>Name</u>	<u>CAS</u>	<u>Concentration %</u>
17 $\alpha$ -Ethinylestradiol-2,4,16,16-d <sub>4</sub>	350820-06-3	> 98

### Section 4. First aid measures

**Eye contact:** Flush eyes with water as a precaution.

**Skin contact:** Wash off with soap and plenty of water. Consult a physician.

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

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

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

## **Section 5. Firefighting measures**

**Flammability of the product:** Not flammable or combustible.

**Products of combustion:** Hazardous decomposition products formed under fire conditions: Carbon oxides.

**Firefighting media and instructions:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special protective equipment for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

## **Section 6. Accidental release measures**

**Personal precautions:** Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Avoid breathing dust.

**Environmental precautions:** Do not let product enter drains. Discharge into the environment must be avoided.

**Methods for cleaning up:** Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

## **Section 7. Handling and storage**

**Handling:** Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation.

**Storage:** STORE REFRIGERATED. Adequate ventilation.

## **Section 8. Exposure Controls, Personal Protections**

**Engineering controls:** Use mechanical exhaust or laboratory fumehood to avoid exposure.

**Eyes:** Safety glasses with side-shields conforming to NIOSH (US) or EN 166 (EU).

**Respiratory:** 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).

**Hands:** Handle with gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Skin/body:** Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## **Section 9. Physical and chemical properties (unlabelled)**

**Molecular weight:** 296.40 g/mol

**Physical status:** Solid

**Color:** White to off-white

**Odour:** No data available

**Density:** No data available

**Melting point:** 182 - 183 °C (360 - 361 °F)

**Boiling point:** No data available

**Vapour pressure:** No data available

**Vapour density:** No data available

**Partition coefficient (octanol/water):** log Pow: 3.67

**Water solubility:** 11 mg/L

**Lower explosion limit:** No data available.

**Upper explosion limit:** No data available.

**Auto-ignition temperature:** No data available.

**Flash point:** No data available.

## **Section 10. Stability and reactivity**

**Stability and reactivity:** Stable under recommended storage conditions.

**Incompatibility:** Strong oxidizing agents.

**Products of combustion:** Hazardous decomposition products formed under fire conditions: Carbon oxides.

**Reactivity conditions:** No data available.

## **Section 11. Toxicological information (unlabelled)**

**Toxicological data:** 17 $\alpha$ -Ethinylestradiol

### **Information on ingredients:**

<b><u>Name</u></b>	<b><u>CAS</u></b>	<b><u>LD<sub>50</sub></u></b>	<b><u>LC<sub>50</sub></u></b>
17 $\alpha$ -Ethinylestradiol	57-63-6	Oral - Rat - 960 mg/kg	No data available

### **Potential acute effects**

- **Eyes:** No data available.
- **Skin:** No data available.
- **Inhalation:** No data available.
- **Ingestion:** Harmful if swallowed.

### **Potential chronic effects**

- **Carcinogenic effects:** There is sufficient evidence for the carcinogenicity of ethinylestradiol in experimental animals. In the absence of adequate data in humans, it is reasonable, for practical purposes to regard ethinylestradiol as if it presented a carcinogenic risk to humans. Studies in humans strongly suggest that the administration of estrogens is causally related to an increased incidence of endometrial carcinoma; there is no evidence that ethinylestradiol is different from other estrogens in this respect. IARC: 2 - Group 2A: Probably carcinogenic to humans (Ethinylestradiol). ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- **Mutagenic effects:** No data available
- **Teratogenic effects:** Laboratory experiments have shown teratogenic effects.
- **Medical conditions aggravated by overexposure:** No data available.

## **Section 12. Ecological information**

### **Ecological data:**

<b><u>Name</u></b>	<b><u>Results</u></b>	<b><u>Species</u></b>	<b><u>Period</u></b>
17 $\alpha$ -Ethinylestradiol	No data available		

**Effects on environment:** No data available.

**Mobility:** No data available.

**Environmental precautions:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

## **Section 13. Disposal considerations**

**Waste disposal:** Contact a licensed professional waste disposal service to dispose of this material.

## **Section 14. Transportation information**

### **Classification DOT/IMDG/IATA label:**

**Shipping name:** Not dangerous goods

**UN number:** None

**Class:** None

**Packaging group:** None

**Additional information:** None

## **Section 15. Regulatory information**

### **UNITED STATES: NFPA classification**



Health: 1  
Flammable: 0  
Reactivity: 0  
Special conditions: None

**Legend: 4: Severe, 3: High, 2: Moderate, 1: Slightly, 0: Not hazardous**

### **U.S. Federal regulations:**

**TSCA 8(b) inventory:** 17 $\alpha$ -Ethinylestradiol

**SARA 302/304/311/312 extremely hazardous substances:** Not Listed

**SARA 302/304 emergency planning and notification:** Not Listed

**SARA 302/304/311/312 hazardous chemicals:** Not Listed

**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:** Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard: Not Listed

**CWA (Clean Water Act) 307:** Not Listed

**CWA (Clean Water Act) 311:** Not Listed

**CAA (Clean Air Act) 112 accidental release prevention:** Not Listed

**CAA (Clean Air Act) 112 regulated flammable substances:** Not Listed

**CAA (Clean Air Act) 112 regulated toxic substances:** Not Listed

### **State regulations:**

**DEA List I Chemicals (Precursor Chemicals):** Not Listed

**DEA List II Chemicals (Essential Chemicals):** Not Listed

**Substances in Massachusetts:** Not Listed

**Dangerous substances in New Jersey:** Not Listed

**New York – Dangerous substances with acute effects:** Not Listed

**Dangerous substances in Pennsylvania – right to know:** Not Listed

## **Section 16. Additional information**

### **References:**

- ANSI Z400.1, MSDS Standard, 2001.
- Manufacturer's Material Safety Data Sheet.
- 29CFR Part1910.1200 OSHA MSDS Requirements.
- 49CFR Table List of Hazardous Materials, UN#, Proper Shipping Names, PG. -Canada
- Gazette Part II, Vol. 122, No. 2 Registration SOR/88-64 31 December, 1987 Hazardous Products Act "Ingredient Disclosure List".
- Federal act on the controlled products
- Canadian Transport of Dangerous Goods, Regulations and Schedules, Clear Language version 2002.
- Toxicological repertory, HSC.
- Material safety data sheet from the components.

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**Elaborated by: Toxyscan Inc., 1-866-780-0599**

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