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

Catalogue Number	CS-T-57336
Product Name	Lynestrenol
CAS No.	52-76-6
Category	API
Synonyms	Not available
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning

Hazard Statement(s)

Code	Statement
H302	Harmful if swallowed.
H340	Not available
H351	Not available
H372	Not available

Precautionary Statement(s)

Code	Statement
P203	Not available
P260	Not available
P264	Wash hands thoroughly after handling.
P270	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P317	Not available
P318	Not available
P319	Get medical help if you feel unwell.
P330	Not available
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Lynestrenol
CAS Number : 52-76-6
Molecular Formula : C20H28O
Molecular Weight : 284.4
Parent Chemical : Lynestrenol
Synonyms : Not available
Concentration : Not available

SECTION 4: First aid measures

Not available

SECTION 5: Firefighting measures

Not available

SECTION 6: Accidental release measures

Not available

SECTION-7: Handling and storage

Not available

SECTION 8: Exposure controls / personal protection

Not available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available

Property	Value
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

Not available

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: /CASE REPORTS/ ... /Investigators/ report on a 24-year-old woman with variegate porphyria who, after intake of lynestrenol, developed typical cutaneous lesions but no viscero-neurological symptoms. The diagnosis was based on the characteristic urinary coproporphyrin and fecal protoporphyrin excretion patterns, and the specific peak of plasma fluorescence at 626 nm in spectrofluorometry. Biochemical analysis revealed that most of the family members, though free of clinical symptoms, excrete porphyrin metabolites in urine and stool similar to variegate porphyria, accompanied by a significant decrease of porphobilinogen deaminase activity of a range which is ordinarily found in patients with acute intermittent porphyria only (approximately 50%). These data first led to the assumption of two separate and independently inherited genetic defects, similar to the dual porphyria of Chester. Molecular analysis, however, revealed only a missense mutation of the protoporphyrinogen oxidase gene, but not of the porphobilinogen deaminase gene. Thus, in the family presented, porphobilinogen deaminase deficiency is likely to be a phenomenon secondary to the genetic defect of protoporphyrinogen oxidase. For more Human Toxicity Excerpts (Complete) data for Lynestrenol (8 total), please visit the HSDB record page.
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: /GENOTOXICITY/ Genotoxicity study of synthetic progestin lynestrenol, was carried out on mouse bone marrow cells using sister chromatid exchanges (SCEs) and chromosomal aberrations (CAs) as parameters. Lynestrenol was studied at three different doses (6.87, 13.75 and 27.50 mg/kg body wt.). SCE and CA increased significantly as compared to normal control when treated with lynestrenol at 13.75 and 27.50 mg/kg body wt. The present results suggest that lynestrenol has both a genotoxic and cytotoxic effects in mouse bone marrow cells.
- Carcinogenicity: No data available.
- Reproductive toxicity: /LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Pregnant Belted Dutch rabbits were administered lynestrenol (17-alpha-ethynyl-oestr-4-en-17-beta-ol) orally on days 6-18 of gestation at a dose of 0.5 mg/kg/day. The dose littered on term and the surviving offspring were observed until four weeks old. Neurological disturbances characterized by behavioral abnormalities and locomotor disabilities were observed. About 40% of the offspring died within four weeks, and more than 70% of these had congenital malformations. /LABORATORY ANIMALS: Developmental or Reproductive Toxicity/ Pregnant Belted Dutch rabbits were administered lynestrenol 17-alpha-ethynyl-oestr-4-en-17-beta-ol) orally on days 6-18 of gestation at doses of 0.1, 0.5, and 2.5 mg/kg/day. On day 29 of gestation the does were killed and autopsied and the fetuses were examined for external, visceral and skeletal abnormalities. Lynestrenol administration produced a statistically significant increase in the number of post-implantation loss (p = 0.05) and in the average per cent of abnormal fetuses per dose

group (63%, 66%, and 87% for the medicated group, versus 12% for the placebo group, p = 0.05). None of the doses tested was lethal to the does, but the average weight gain was decreased for the medium and the high dose groups. Abnormalities of the central nervous system and skeletal variants were the most frequent findings in the fetuses.
- STOT-single exposure: No data available.
- STOT-repeated exposure: No data available.
- Aspiration hazard: No data available.

Likely routes of exposure
- No data available.

Symptoms related to the physical, chemical and toxicological characteristics
- /HUMAN EXPOSURE STUDIES/ 8 women, aged 22-28, with normal, ovulatory menstrual cycles, volunteered to take different doses of Lynestrenol to determine its effects on Luteineizing Hormone (LH) secretion, and on plasma progesterone levels. Blood samples were taken in the morning and plasma was immediately separated. Results showed that body temperature varied unpredictably during the cycle, and therefore could not be considered a reliable parameter of ovulation. 0.35 mg of Lynestrenol administered daily was enough to suppress ovulation, as evidenced by the absence of LH during midcycle. Although differences exists in individual reactions, administration of Lynestrenol beyond 0.6 mg. daily always suppresses ovulation because of hypothalamo-pituitary inhibition, while doses below 0.5mg. daily can bring about episodic peaks. It is still not clear how Lynestrenol influences gonadotropins, especially LH, while intermittent bleeding seems to be the only sure side effect.

SECTION 12: Ecological information

Not available

SECTION 13: Disposal considerations

Not available

SECTION 14: Transport information

Not available

SECTION 15: Regulatory information

Not available

SECTION 16: Other information

Not available

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