# **PRODUCT** INFORMATION



## Mestranol

Item No. 23822

CAS Registry No.:	72-33-3	
Formal Name:	3-methoxy-19-norpregna-1,3,5(10)-trien-	///
Synonyms:	20-yn-17 $\alpha$ -ol EE 3-ME, Ethynyl Estradiol 3-methyl ether, NSC 84032, SC-475, $\Delta$ -MVE	ОН
MF:	$C_{21}H_{26}O_{2}$	
FW:	310.4	
Purity:	≥98%	
Supplied as:	A crystalline solid	
Storage:	-20°C	0
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

#### Laboratory Procedures

Mestranol is supplied as a crystalline solid. A stock solution may be made by dissolving the mestranol in the solvent of choice, which should be purged with an inert gas. Mestranol is soluble in organic solvents such as ethanol, methanol, and acetonitrile. The solubility of mestranol in these solvents is approximately 1 mg/ml.

### Description

Mestranol is a semisynthetic estrogen prodrug of ethynyl estradiol (Item No. 10006486), an estrogen receptor agonist.<sup>1</sup> It is demethylated in the liver to ethynyl estradiol. Mestranol has estrogenic properties, inducing RNA synthesis in homogenized mouse uteri following a dose of 1.6 μg/animal, which is 16-fold higher than the dose of ethynyl estradiol needed to induce a similar response.<sup>2</sup> Formulations containing mestranol were previously used as oral contraceptives.

### References

- 1. El-Obeid, H.A. and Al-Badr, A.A. Mestranol. Analytical profiles of drug substances 11, 375-406 (1982).
- 2. Hahn, D.W., McGuire, J.L., Greenslade, F.C., et al. Molecular parameters involved in the estrogenicity of mestranol and ethynylestradiol. Proc. Soc. Exp. Biol. Med. 137(4), 1180-1185 (1971).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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