**PRODUCT INFORMATION**

**Dienogest**

*Item No. 21257*

**CAS Registry No.:** 65928-58-7  
**Formal Name:** (17ɑ)-17-hydroxy-3-oxo-19-norpregna-4,9-diene-21-nitrile  
**Synonym:** STS 557  
**MF:** C₂₀H₂₅NO₂  
**FW:** 311.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 214, 303 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

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**Laboratory Procedures**

Dienogest is supplied as a crystalline solid. A stock solution may be made by dissolving the dienogest in the solvent of choice. Dienogest is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of dienogest in these solvents is approximately 20, 0.1, and 2 mg/ml, respectively.

Dienogest is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, dienogest should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Dienogest has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

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**Description**

Dienogest is a synthetic progestogen. It is ten times more potent than levonorgestrel (Item No. 10006318), as assessed by the Clauberg-McPhail assay.¹ Formulations containing dienogest, in combination with estradiol valerate or ethynyl estradiol (Item No. 10006486), are used as orally administered contraceptives for women.²-⁴ Those containing dienogest alone are useful against endometriosis.⁵

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**References**