1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{12} \text{H}_{10} \text{F}_{3} \text{N}_{3} \text{O}_{4} \)
Batch Molecular Weight: 317.22
Physical Appearance: White solid
Solubility: ethanol to 25 mM with gentle warming, DMSO to 25 mM
Storage: Store at RT

2. ANALYTICAL DATA

TLC: \( R_f = 0.73 \) (Chloroform:Methanol [10:3])
Melting Point: Between 162 - 163°C
HPLC: Shows 100% purity
\(^1\)H NMR: Consistent with structure
Microanalysis: Carbon Hydrogen Nitrogen

Theoretical: 45.44 3.18 13.25
Found: 45.34 3.18 13.15

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Name:** Nilutamide  
**Catalog No.:** 1759  
**Batch No.:** 1  

**CAS Number:** 63612-50-0  
**IUPAC Name:** 5,5-Dimethyl-3-[4-nitro-3-(trifluoromethyl)phenyl]-2,4-imidazolidinedione

**Description:**  
Non-steroidal and silent antiandrogen. Binds to androgen receptors and also inhibits androgen biosynthesis in vitro. In rats in vivo it inhibits androgen-induced prostate weight increase and inhibits negative androgen-dependent gonadotropin feedback leading to an increase in luteinising hormone and testosterone. Orally active.

**Physical and Chemical Properties:**  
- **Batch Molecular Formula:** C₁₂H₁₁F₃N₃O₄  
- **Batch Molecular Weight:** 317.22  
- **Physical Appearance:** White solid  
- **Minimum Purity:** >99%  

**Storage:** Store at RT

**Solubility & Usage Info:**  
- ethanol to 25 mM with gentle warming  
- DMSO to 25 mM

**Stability and Solubility Advice:**  
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).  
Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:  
SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.  
SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquotted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**  
- Raynaud et al. (1979) Action of a non-steroid anti-androgen, RU 23908, in peripheral and central tissues. J.Steroid Biochem. 11 93. PMID: 385986.  

---

**Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use**

**bio-techne.com**  
info@bio-techne.com  
techsupport@bio-techne.com  

**North America**  
Tel: (800) 343 7475

**China**  
info.cn@bio-techne.com  
Tel: +86 (21) 52380373

**Europe Middle East Africa**  
Tel: +44 (0)1235 529449

**Rest of World**  
www.tocris.com/distributors  
Tel:+1 612 379 2956