Product Name: Isotretinoin
Catalog No.: 5513
Batch No.: 1
CAS Number: 4759-48-2
EC Number: 225-296-0
IUPAC Name: 13-cis-Retinoic acid

1. PHYSICAL AND CHEMICAL PROPERTIES
   - Batch Molecular Formula: C_{20}H_{28}O_{2}
   - Batch Molecular Weight: 300.44
   - Physical Appearance: Orange solid
   - Solubility: DMSO to 100 mM
   - Storage: Store at -20°C
   - Batch Molecular Structure:

2. ANALYTICAL DATA
   - Melting Point: Between 176 - 177°C
   - HPLC: Shows 99.5% purity
   - ^1H NMR: Consistent with structure
   - Mass Spectrum: Consistent with structure
   - Microanalysis:
     
     |     | Carbon | Hydrogen | Nitrogen |
     |-----|--------|----------|----------|
     | Theoretical | 79.96  | 9.39     |
     | Found       | 80.02  | 9.43     |
**Product Name:** Isotretinoin  
**Catalog No.:** 5513  
**Batch No.:** 1  
**EC Number:** 225-296-0

**Description:**  
Endogenous agonist for retinoic acid receptors. Promotes neurite outgrowth, cell differentiation and inhibits proliferation in a neuroblastoma cell line. Also increases protein expression levels of MYCN and retinoic acid receptor-β. Anti-inflammatory.

**Physical and Chemical Properties:**  
- **Batch Molecular Formula:** C_{20}H_{26}O_{2}  
- **Batch Molecular Weight:** 300.44  
- **Physical Appearance:** Orange solid  
- **Minimum Purity:** >99%  
- **Batch Molecular Structure:**

![Batch Molecular Structure](image)

**Storage:** Store at -20°C. This product is packaged under an inert atmosphere.  
**CAUTION** - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

**Solubility & Usage Info:**  
- **DMSO to 100 mM**  
- **ethanol to 20 mM with gentle warming**

**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 aliquoted 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:**  