



# **Certificate of Analysis**

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Product Name: WIN 18446 Catalog No.: 4736 Batch No.: 1

CAS Number: 1477-57-2 EC Number: 216-033-0

IUPAC Name: N,N-1,8-Octanediylbis(2,2-dichloroacetamide)

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{12}H_{20}CI_4N_2O_2.^{1/4}H_2O$ 

Batch Molecular Weight: 370.61

Physical Appearance: White solid

Solubility: DMSO to 100 mM

ethanol to 20 mM

Storage: Store at +4°C

Batch Molecular Structure:

#### 2. ANALYTICAL DATA

Melting Point:

Between 128 - 129°C

1H NMR:

Consistent with structure

Mass Spectrum:

Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 38.89 5.56 7.56 Found 38.85 5.55 7.47





# **Product Information**

Print Date: Apr 28<sup>th</sup> 2015 **WWW.tocris.com** 

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IUPAC Name: *N,N*-1,8-Octanediylbis(2,2-dichloroacetamide)

### **Description:**

Inhibitor of aldehyde dehydrogenase 1a2 (ALDH1a2) (IC $_{50}$  = 0.3  $\mu$ M). Inhibits the biosynthesis of retinoic acid from retinol in neonatal and adult murine testis.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>12</sub>H<sub>20</sub>Cl<sub>4</sub>N<sub>2</sub>O<sub>2</sub>. ¼ H<sub>2</sub>O

Batch Molecular Weight: 370.61 Physical Appearance: White solid

#### **Batch Molecular Structure:**

Storage: Store at +4°C

#### Solubility & Usage Info:

DMSO to 100 mM ethanol to 20 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 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:

Amory et al (2011) Suppression of spermatogenesis by bisdichloroacetyldiamines is mediated by inhibition of testicular retinoic acid biosynthesis. J.Androl. 32 111. PMID: 20705791.

Hogarth et al (2011) Suppression of Stra8 expression in the mouse gonad by WIN 18,446. Biol.Reprod. 84 957. PMID: 21209416.

