



## CERTIFICATE OF ANALYSIS

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### 1. Identification

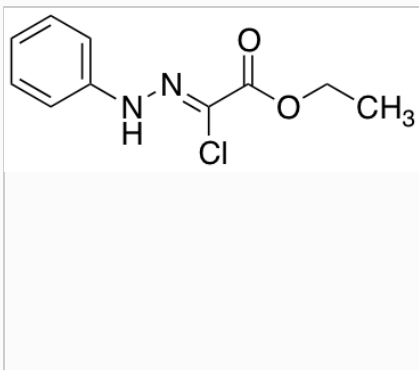
**Catalogue Number:** C385953

**CAS Number:** 28663-68-5

**Product:** 2-Chloro-2-(phenylhydrazono)acetic Acid Ethyl Ester

**Synonym:** Ethyl (Phenylhydrazono)chloromethylcarboxylate; Ethyl 2-(2-Phenylhydrazono)-2-chloroacetate; Ethyl 2-Chloro-2-(phenylhydrazono)acetate; Ethyl Chloro(phenylhydrazono)acetate; Ethyl Chloroglyoxylate phenylhydrazone; NSC 333417; Oxalyl Chloride Phenylhydrazone Ethyl Ester;

**Structure:**



**Molecular Formula:**

$C_{10}H_{11}N_2O_2Cl$

**Molecular weight:**

226.65

**Source of Product:**

N/A

**Solubility:**

Chloroform (Slightly),  
Methanol (Slightly)

**Lot Number:** 11-QIU-91-1

**Purity:** 97%

**Shipping Condition:** This Product Is Stable To Be Shipped At Room Temperature

**Storage Condition:** -20°C, Inert atmosphere

### 2. Warning

**Warning 1:**

**Warning 2:**

**Warning 3:**

### 3. Analytical Information

Tests:	Specifications:	Results:
Appearance	Pale Yellow to Light Yellow Solid	Pale Yellow Solid
NMR	Conforms to Structure	Conforms
Elemental Analysis	Conforms	%C: 52.45, %H: 4.82, %N: 12.19
MS	Conforms to Structure	Conforms
HPLC Purity	Report Result	95.68% (325 nm)

**Additional Information:** N/A

Purity is based on the analytical results of the tests performed. NMR and Elemental Analysis (if available) may have an accuracy of  $\pm 2\%$ . Isotopic purity is based on mass distribution observed. The contents of the specifications are subject to change without advance notice, and the specification values displayed here are the most up to date values.

### 4. Signatures

Reviewed By	Reviewed By	C of A Approved By	Test Date	Retest Date
Henry Tieu	Toni Rantanen	Chanell Chu	6/21/2021	6/19/2025