



## CERTIFICATE OF ANALYSIS

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### 1. Identification

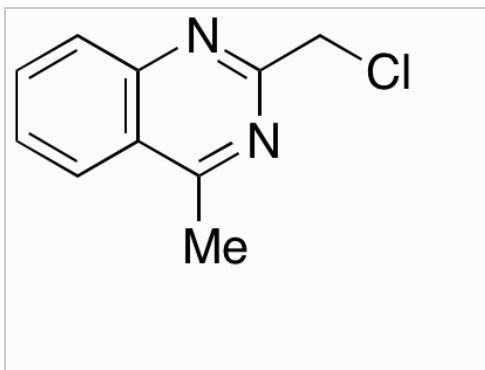
**Catalogue Number:** C369850

**CAS Number:** 109113-72-6

**Product:** 2-(Chloromethyl)-4-methylquinazoline

**Synonym:** NSC 48971; Linagliptin 2-Chloromethyl Impurity

**Structure:**



**Molecular Formula:**

C<sub>10</sub>H<sub>9</sub>ClN<sub>2</sub>

**Molecular weight:**

192.64

**Source of Product:**

N/A

**Solubility:**

Chloroform (Slightly),  
Methanol (Slightly)

**Lot Number:** 1-PQY-23-1

**Purity:** 98%

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

**Storage Condition:** 4°C

### 2. Warning

**Warning 1:**

**Warning 2:**

**Warning 3:**

### 3. Analytical Information

**Tests:**

**Specifications:**

**Results:**

MS

Conforms to Structure

Conforms

NMR

Conforms to Structure

Conforms

HPLC Purity

Report Result

99.93% (235 nm)

Appearance

White to Pale Yellow Solid

White to Off-White Solid

**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**

Farnaz Mahmoudi

Toni Rantanen

Chanell Chu

5/19/2023

5/17/2030