



## CERTIFICATE OF ANALYSIS

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### 1. Identification

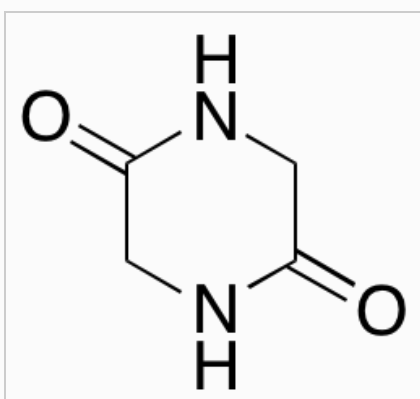
**Catalogue Number:** P479920

**CAS Number:** 106-57-0

**Product:** Glycine Anhydride(2,5-Piperazinedione)

**Synonym:** 2,5-Diketopiperazine; 2,5-Dioxopiperazine; Cyclo(Gly-Gly); Cyclo(glycylglycyl); Cyclodiglycine; Cycloglycylglycine; Diglycolyl Diamide; Diketopiperazine; Glycine Cyclic Dimer; N-glycylglycine Cyclic Peptide; Glycylglycine Lactam; NSC 26345;  $\alpha,\gamma$ -Diapiperazine

**Structure:**



**Molecular Formula:**

$C_4H_6N_2O_2$

**Molecular weight:**

114.1

**Source of Product:**

N/A

**Solubility:**

DMSO (Slightly, Heated),  
Methanol (Slightly, Heated)

**Lot Number:** 1-MJS-144-1

**Purity:** 98%

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

**Storage Condition:** 20°C

### 2. Warning

**Warning 1:** Not Determined

**Warning 2:**

**Warning 3:**

### 3. Analytical Information

Tests:	Specifications:	Results:
Appearance	White to Off-White Solid	White to Off-White Solid
MS	Conforms to Structure	Conforms
NMR	Conforms to Structure	Conforms
HPLC Purity	Report Result	100.00% (ELSD)

**Additional Information:**

TLC Conditions: SiO<sub>2</sub>; Dichloromethane : Methanol = 4 : 1; Visualized with KMnO<sub>4</sub>; Single Spot, R<sub>f</sub> = 0.45

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
Neha Khanna	Toni Rantanen	My Nguyen	11/28/2019	11/26/2026