



## CERTIFICATE OF ANALYSIS

20 Martin Ross Avenue, North York, ON, M3J 2K8, CANADA  
Tel: (416) 665-9696, Fax: (416) 665-4439  
Email: orders.trc@lgcgroup.com Website: www.trc-canada.com

### 1. Identification

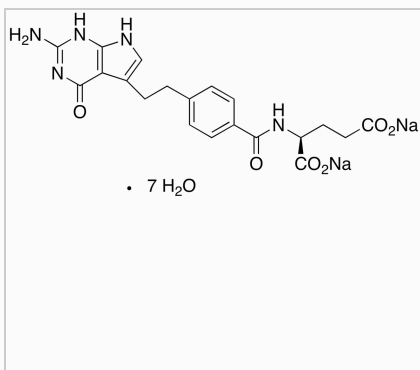
**Catalogue Number:** P219550

**CAS Number:** 357166-29-1

**Product:** Pemetrexed Disodium Heptahydrate

**Synonym:** N-[4-[2-(2-amino-4,7-dihydro-4-oxo-3H-pyrrolo[2,3-d]pyrimidin-5-yl)ethyl]benzoyl]-L-glutamic Acid Disodium Salt Heptahydrate

**Structure:**



**Molecular Formula:**

C<sub>20</sub>H<sub>33</sub>N<sub>5</sub>Na<sub>2</sub>O<sub>13</sub>

**Molecular weight:**

597.48

**Source of Product:**

N/A

**Solubility:**

Methanol (Very Slightly),  
Water (Sparingly)

**Lot Number:** 18-SBL-173-1

**Purity:** 97%

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

**Storage Condition:** -20°C

### 2. Warning

**Warning 1:**

**Warning 2:**

**Warning 3:**

### 3. Analytical Information

Tests:	Specifications:	Results:
Elemental Analysis	Conforms	%C: 40.08, %H: 5.65, %N: 11.61
Appearance	White to Off-White Solid	White Solid
NMR	Conforms to Structure	Conforms
MS	Conforms to Structure	Conforms
Sodium Content	Report Result	7.48% by Ion Chromatography
Specific Rotation	Report Result	+9.8° (c = 0.3, Water)
Water Content	Report Result	20.8% by Karl Fischer

**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 ± 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
Nicole Yip	Toni Rantanen	Chanell Chu	9/15/2021	9/13/2025