1. PHYSICAL AND CHEMICAL PROPERTIES

- **Batch Molecular Formula:** \( C_{17}H_{10}ClFN_6 \cdot \frac{1}{4}H_2O \)
- **Batch Molecular Weight:** 357.25
- **Physical Appearance:** Light brown solid
- **Solubility:** DMSO to 20 mM with gentle warming
- **Storage:** Store at RT
- **Batch Molecular Structure:**

![Molecular Structure Image]

2. ANALYTICAL DATA

- **TLC:** \( R_f = 0.5 \) (Chloroform:Methanol [9:1])
- **HPLC:** Shows 99.9% purity
- **\(^1\)H NMR:** Consistent with structure
- **Mass Spectrum:** Consistent with structure
- **Microanalysis:**

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Found</th>
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</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>57.15</td>
<td>57.44</td>
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<tr>
<td>Hydrogen</td>
<td>2.96</td>
<td>2.81</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>23.52</td>
<td>23.25</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
**Product Information**

**Product Name:** SD 208  
**Catalog No.:** 3269  
**Batch No.:** 5

**Description:**  
Potent, orally active ATP-competitive transforming growth factor-β receptor 1 (TGF-βRI) inhibitor (IC₅₀ = 49 nM). Displays > 100-fold and > 17-fold selectivity over TGF-βRII and other common kinases respectively. Exhibits anti-inflammatory and antitumor activity. Also promotes an antiglioma immune response. Ameliorates germinal matrix hemorrhage-induced neurological deficits in neonatal rats.

**Physical and Chemical Properties:**  
**Batch Molecular Formula:** C₁₁H₁₀ClFN₄·½H₂O  
**Batch Molecular Weight:** 357.25  
**Physical Appearance:** Light brown solid  
**Minimum Purity:** >98%

**Batch Molecular Structure:**

![Molecular Structure Image]

**Storage:** Store at RT

**Solubility & Usage Info:**  
DMSO to 20 mM with gentle warming

**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:**  