1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{20}\text{H}_{16}\text{N}_{4}\text{O}_{2}\text{S} \)
Batch Molecular Weight: 376.43
Physical Appearance: Pale yellow solid
Solubility: DMSO to 50 mM
Solubility: Ethanol to 5 mM
Storage: Store at +4°C
Batch Molecular Structure:

![Molecular Structure Image]

2. ANALYTICAL DATA

HPLC: Shows 99.9% purity
\(^1\)H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:
Carbon Hydrogen Nitrogen
Theoretical 63.82 4.28 14.88
Found 63.72 4.22 14.83
Product Name: Indiplon
CAS Number: 325715-02-4
IUPAC Name: N-Methyl-N-[3-[3-[2-thienylcarbonyl]pyrazolo[1,5-a]pyrimidin-7-yl]phenyl]acetamide

Description:
Potent GABA<sub>A</sub> receptor positive allosteric modulator that acts at the benzodiazepine site (K<sub>i</sub> values are 1.2 and 1.7 nM in rat frontal cortex and cerebellum respectively). Displays ~ 10-fold selectivity for α1 subunit-containing receptors (EC<sub>50</sub> values are 2.6, 24, 60 and 77 nM for α1β2γ2, α2β2γ2, α3β3γ2 and α5β2γ2 receptors respectively). Exhibits sedative, hypnotic, anxiolytic and anticonvulsant activity in vivo and is orally active.

Physical and Chemical Properties:
Batch Molecular Formula: C<sub>29</sub>H<sub>24</sub>N<sub>4</sub>O<sub>2</sub>S
Batch Molecular Weight: 376.43
Physical Appearance: Pale yellow solid
Minimum Purity: >99%

Batch Molecular Structure:

![Molecular Structure](image)

Storage: Store at +4°C

Solubility & Usage Info:
DMSO to 50 mM
ethanol to 5 mM

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: