1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( \text{C}_{15}\text{H}_{15}\text{NO}_{2}\text{S} \)

Batch Molecular Weight: 273.35

Physical Appearance: White solid

Solubility: DMSO to 75 mM, ethanol to 10 mM

Storage: Store at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.3% purity

\(^1\text{H NMR:} \)

Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical: 65.91 5.53 5.12

Found: 65.75 5.51 5.3
Product Name: Modafinil
Catalog No.: 1811
Batch No.: 3

CAS Number: 68693-11-8
IUPAC Name: 2-[(Diphenylmethyl)sulfinyl]acetamide

Description:
Psychostimulant that displays neuroprotective and antiparkinsonian activity in a primate model of Parkinson's disease. Promotes vigilence and wakefulness without the central and peripheral side effects associated with conventional dopaminergic psychostimulants. Mechanism of action is not fully understood, possibly via modulation of catecholamine/GABAergic neurotransmission.

Physical and Chemical Properties:
Batch Molecular Formula: C_{15}H_{18}NO_{2}S
Batch Molecular Weight: 273.35
Physical Appearance: White solid
Minimum Purity: >98%

Storage: Store at +4°C
Solubility & Usage Info:
- DMSO to 75 mM
- Ethanol to 10 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 aliquotted 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.

Other Information:
INFORMATION FOR CUSTOMERS IN THE USA ONLY
This product is a Schedule IV DEA controlled substance and customers in the USA are required to hold a controlled substance registration in order to purchase and possess this material (in accordance with Title 21 code of federal regulations part 1300 to end).

References:
