Thiosildenafil
Item No. 13939

CAS Registry No.: 479073-79-5
Formal Name: 5-[2-ethoxy-5-[(4-methyl-1-piperazinyl)sulfonyl]phenyl]-1,6-dihydro-1-methyl-3-propyl-7H-pyrazolo[4,3-d]pyrimidine-7-thione
MF: C_{22}H_{30}N_{6}O_{3}S_{2}
FW: 490.6
Purity: ≥98%
UV/Vis.: λ_{max}: 226, 295, 354 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Thiosildenafil is supplied as a crystalline solid. A stock solution may be made by dissolving the thiosildenafil in the solvent of choice, which should be purged with an inert gas. Thiosildenafil is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of thiosildenafil in these solvents is approximately 5 and 16 mg/ml, respectively.

Thiosildenafil is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, thiosildenafil should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Thiosildenafil has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Thiosildenafil is a derivative of the phosphodiesterase 5 (PDE5) inhibitor sildenafil (Item No. 10008671).¹

Reference