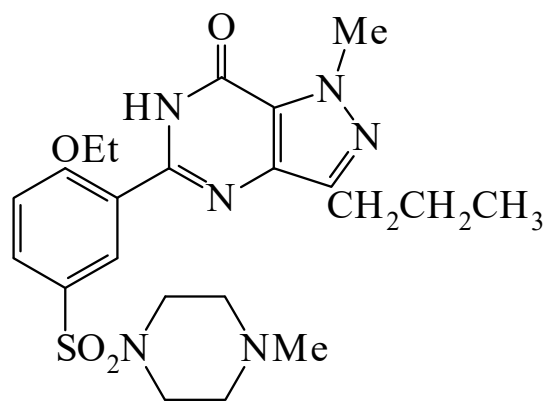




>>Entry Name: Sildenafil, BAN, INN

Synonym(s): 1-[[3-(4,7-Dihydro-1-methyl-7-oxo-3-propyl-1*H*-pyrazolo[4,3-*d*]pyrimidin-5-yl)-4-ethoxyphenyl]sulfonyl]-4-methylpiperazine, 9Cl. 5-[2-Ethoxy-5-(4-methylpiperazin-1-ylsulfonyl)phenyl]-1,6-dihydro-1-methyl-3-propylpyrazolo[4,3-*d*]pyrimidin-7-one. Viagra. UK 9248010



CAS Registry Number: 139755-83-2

Molecular Formula: C₂₂H₃₀N₆O₄S

Molecular Weight: 474.583

Accurate Mass: 474.204924

Percentage Composition: C 55.68%; H 6.37%; N 17.71%; O 13.49%; S 6.76%

Biological Use/Importance: Selective inhibitor of cyclic GMP specific phosphodiesterase (Type V), which acts as a smooth muscle relaxant and vasodilator, probably through enhancing the action of nitric oxide. It relaxes blood vessels of the corpus cavernosum of the penis, and is used in oral therapy for the treatment of male erectile dysfunction

Physical Description: Cryst. (MeOH/DMF)

Development Status: Marketed drug. Launched 1998. Worldwide 27th best selling prescription drug (\$1.34 bn) (Pfizer) (2000, PharmaBusiness)

Melting Point: Mp 187-189°

>>Derivative: Citrate

Synonym(s): Sildenafil citrate, USAN

CAS Registry Number: 171599-83-0

Physical Description: No phys. props. reported

Development Status: Approved by FDA (1998)

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