

Sildenafil Citrate (CAS No.: 139755-83-2)



Molecular Structure

Identifiers

CAS number 139755-83-2

Chemical data

Formula C₂₂H₃₀N₆O₄S

Mol. mass base: 474.6 g/mol

SMILES eMolecules & PubChem

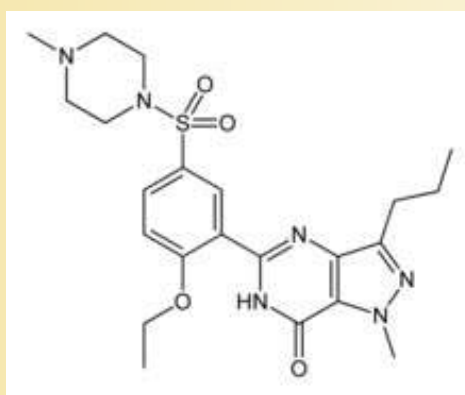
Pharmacokinetic data

Bioavailability 40%

Metabolism Hepatic (mostly CYP3A4, also CYP2C9)

Half life 3 to 4 hours

Excretion Fecal (80%) and renal (around 13%)



Sildenafil citrate is designated chemically as 1-[[3-(6,7-dihydro-1-methyl-7-oxo-3-propyl-1H-pyrazolo[4,3-d]pyrimidin-5-yl)-4-ethoxyphenyl]sulfonyl]-4-methylpiperazine citrate. Sildenafil citrate is a white to off-white crystalline powder with a solubility of 3.5 mg/mL in water and a molecular weight of 666.7. VIAGRA (sildenafil citrate) is formulated as blue, film-coated rounded-diamond-shaped tablets equivalent to 25 mg, 50 mg and 100 mg of sildenafil for oral administration. In addition to the active ingredient, sildenafil citrate, each tablet contains the following inactive ingredients: microcrystalline cellulose, anhydrous dibasic calcium phosphate, croscarmellose sodium, magnesium stearate, hypromellose, titanium dioxide, lactose, triacetin.