

# [Oros is precisely controlled, by the rate](https://assignbuster.com/oros-is-precisely-controlled-by-the-rate/)

[Transportation](https://assignbuster.com/essay-subjects/transportation/)

Oros Colon Targeting: Components 1.    Semipermeablemembrane 2.    Hard gelatin capsule Working    This has one osmotic agent orit consists of as many as five to six push pull osmotic unit filled in a hard gelatincapsule. After coming in association with the aqueous environment, gelatincapsule dissolved and the enteric coating avoids entry of fluids from stomachto the system, when system pass into the small intestine the enteric coating liquefiesand water is absorbed into the core thus causing the push compartment to swell. At the same time flow-able gel is formed in the drug compartment, which ispushed out of the orifice at a rate, which is precisely controlled, by the rateof water transport across the semi permeable membraneAdvantage    Itis used as a one or two times a day formulation for site specific delivery ofdrugs to the colon.

Monolithic osmotic system: Components1.    Polymermatrix capsule 2.    Semipermeable membrane  Working It consists of a simple dispersion of water-soluble agent in a polymermatrix . When the system comes across with the aqueous environment water imbibitionby the active agent’s results in distortion of the polymer matrix capsuleencapsulating the drug this delivering it to the outside environment. Mostly thisprocess proceeds at the external environment of the polymeric matrix, but slowlyheads towards the inside of the matrix in a sequential manner, but this system isnot succeeded if more than 20 –30 volumes per liter of the active agents are combinedin to the device cross this level, significant contribution from the simpleleaching of the substance take place   Osmotic Matrix Tablet (OSMAT): Components 1.    Hydrophilicpolymer 2.

Gelin aqueous media forming semi permeable Working This type of system employs the swellings property of hydrophilicpolymer, which swells and gels in aqueous medium making a semipermeablemembrane in situ. The rate of drug delivery from this system is influenced bythe insertion of osmogent with a matrix delivery of drug from OSMAT don’t relyon agitation & is low cost method.  Evaluation aspects of osmotic DDSØ PowderevaluationWeight Bulk density Tapped density Carr’s indexAngle of repose Ø TabletevaluationContent uniformity Hardness Thickness Friability Effect of Ph. Stability studies Dissolution Disintegration