

Oros is precisely
controlled, by the rate

[Transportation](#)



Oros Colon Targeting: Components 1. Semipermeable membrane 2. Hard gelatin capsule Working This has one osmotic agent or it consists of as many as five to six push pull osmotic unit filled in a hard gelatin capsule. After coming in association with the aqueous environment, gelatin capsule dissolved and the enteric coating avoids entry of fluids from stomach to the system, when system pass into the small intestine the enteric coating liquefies and 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 is pushed out of the orifice at a rate, which is precisely controlled, by the rate of water transport across the semi permeable membrane Advantage It is used as a one or two times a day formulation for site specific delivery of drugs to the colon.

Monolithic osmotic system: Components 1. Polymer matrix capsule 2. Semipermeable membrane Working It consists of a simple dispersion of water-soluble agent in a polymer matrix . When the system comes across with the aqueous environment water imbibition by the active agent's results in distortion of the polymer matrix capsule encapsulating the drug this delivering it to the outside environment. Mostly this process proceeds at the external environment of the polymeric matrix, but slowly heads towards the inside of the matrix in a sequential manner, but this system is not succeeded if more than 20 -30 volumes per liter of the active agents are combined in to the device cross this level, significant contribution from the simple leaching of the substance take place Osmotic Matrix Tablet (OSMAT): Components 1. Hydrophilic polymer 2.

Gelin aqueous media forming semi permeable Working This type of system employs the swellings property of hydrophilic polymer, which swells and gels in aqueous medium making a semipermeable membrane in situ. The rate of drug delivery from this system is influenced by the insertion of osmogen with a matrix delivery of drug from OSMAT don't rely on agitation & is low cost method. Evaluation aspects of osmotic DDS Ø Powder evaluation Weight Bulk density Tapped density Carr's index Angle of repose Ø

Tablet evaluation Content uniformity Hardness Thickness Friability Effect of Ph. Stability studies Dissolution Disintegration