NREP/Taste Masking in drugs

EXECUTIVE SUMMARY

A new reverse enteric polymer responsive to changes of pH – which can be used for taste masking of drugs. Can also be used in designing custom release profiles.

TECHNOLOGY DESCRIPTION

New Reverse Enteric Polymer (NREP) is a cationic ter-polymer which is responsive to changes in pH. It is hydrophobic and hence insoluble in water. Their main use would be for taste making of drugs and designing custom release profiles in drug formulations.

MARKET POTENTIAL

- Global market for excipient chemicals will be worth $4.3 billion by 2011*
- Oral drug delivery market is poised to grow at 10% per annum to reach the $50 billion mark by 2010**
- Novel drug delivery methods are being sought after to develop novel products and maintain market leadership and profits**
- Large pharma companies are looking to partner with drug delivery companies** with niche technology – making it ideal to develop NREP products

**http://www.prlog.org/10042410-world-market-for-excipient-chemicals-will-reach-4-3-billion-by-2011-says-new-report.html, ** http://www.in-pharmatechnologist.com/Materials-Formulation/Oral-drug-delivery-sector-tipped-for-explosive-growth

VALUE/ADVANTAGES

- Taste masking of solid dosage forms and liquid orals
- High Tg (121ºC) – easier to process and cure
- Enhances biocompatibility
- Could be used to custom sustained release of drugs
- Avoids adverse drug-polymer interactions
- Rapid release at gastric pH
- Inhibits polymorphism in drugs
- More stable dosage forms

APPLICATIONS

- Use as excipient
- Delivery of drugs
- Taste masking
- Coatings for moisture barrier, sustained release and rapid release
- Polymorphism inhibition

TECHNOLOGY STATUS

- Demonstrated at the lab scale
- On the lookout for potential partners for licensing
- Patents granted: Indian, US7294347

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