

Pharmaceuticals Division



100% Customer delight at all touch points

Umang Pharmatech Pvt Ltd.

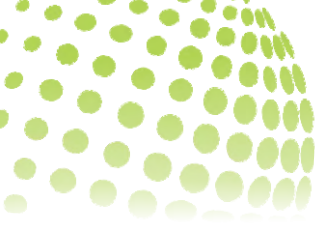
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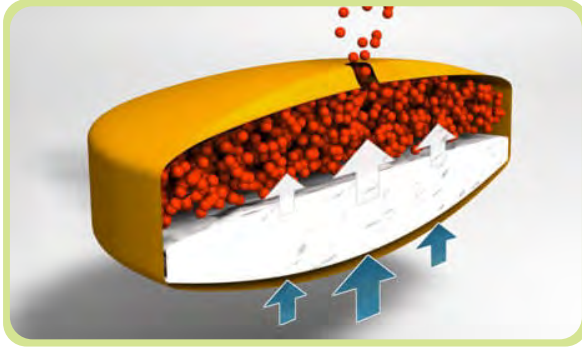
PRODUCT RANGE

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TASTE MASK GRANULES



Features

- Taste masking is done by encapsulation technology
- Both hydrophobic and hydrophilic actives can be incorporated.
- Extremely round pellets with different sizes.
- Micro pellets 60-80#

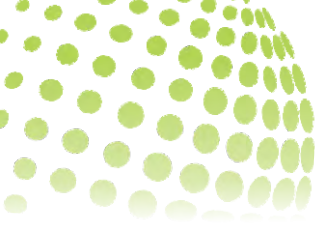
Advantage

- Masks the taste of obnoxious & bitter drugs.
- It not only improves taste but also the formulation and performance.
- Better patient acceptance.

Benefits

- Acceptable degree of palatability increases.
- Number of therapeutically active herbal molecules having bitter taste can be encapsulated.
- Patient friendly for oral syrup.

| Sr No. | Product | Strength | Suitable Dosage Form | Dose | Reference Product | API:DMF; Dossier-CTD |
|--------|---|---------------|----------------------|---|-------------------|----------------------|
| 1 | AZITHROMYCIN TM GRANULES | 7.5% | SUSPENSION | 100MG, 200MG/5ML | ZITHROMAX | Available |
| 2 | CLARITHROMYCIN TM GRANULES | 27.5%, 43.75% | SUSPENSION | 125MG, 250MG/5ML | BIAXIN | Available |
| 3 | Ibuprofen TM granules | 6.7% | SUSPENSION | 100 MG/5ML | IBUPROFEN | Available |
| 4 | Paracetamol TM granules | 12% | SUSPENSION | 125 MG,150 MG,240 MG,250 MG,156.25 MG/5ML | IHS | Available |
| 5 | Mebeverine HCl TM granules | 20% | SUSPENSION | 50 mg/5ml | IHS | Available |
| 6 | Linezolid TM granules | 20% | SUSPENSION | 100 mg/5ml | TYLENOL | Available |
| 7 | Ciprofloxacin TM granules | 20% | SUSPENSION | 250 mg, 500 mg/5ml | ZYVOX | Available |
| 8 | Cefuroxime TM granules | 25%, 50% | SUSPENSION | 125 mg, 250 mg/5ml | CIPRO | Available |
| 9 | Ampicillin TM granules | 25%, 50% | SUSPENSION | 125 mg, 250 mg/5ml | PRINCIPEN | Available |
| 10 | Ampicillin Cloxacillin TM granules | 31.25%, 62.5% | SUSPENSION | 125 mg/125 MG 62.5mg/62.5/31.25/31.25mg/5ml | IHS | Available |
| 11 | Amoxicillin Clavulonic acid TM granules | 43%, 60% | SUSPENSION | 600mg/42.9 MG/5ML | AUGMENTINES | Available |



SUSTAINED RELEASE PELLETS



Features

- Spherical shape and smooth surface.
- Extremely round pellets with different sizes can be produced.
- 4 hr / 8hr / 12hr / 16hr release pattern.
- Only approved synthetic and natural colors used.
- Pellets are evaluated for assay/ drug content, water content, acid resistance and dissolution rate.
- Two years shelf life.

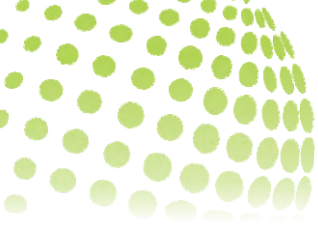
Advantage

- Uniform release of drug substance over time.
- Reduction in frequency of intakes.
- Reduced adverse side effects.
- Taste masking problem is also solved.
- Better patient compliance.
- More stable and cost effective.

Benefits

- Prolonged therapeutic effect by continuously releasing medication over an extended period of time after administration of a single dose of the drug.
- Pellets flow freely and are easy to pack without significant difficulties (resulting in uniform and reproducible fill weight of capsules).
- Pellets are less susceptible to dose dumping.
- It reduces accumulation of drugs especially proven advantageous in the case of irritating drugs.

| Sr No. | Product | Strength | Suitable Dosage Form | Dose | Reference Product | API:DMF; Dossier-CTD |
|--------|---|---------------|----------------------|---------------|-------------------|----------------------|
| 1 | LEVOSULPRIDE SR PELLETS | 60% | Capsules | 75mg | GENERIC | Available |
| 2 | DICLOFENAC SODIUM SR PELLETS | 30%, 40% | Capsules | 35mg | ZORVOLEX | Available |
| 3 | KETOPROFEN PELLETS | 65% | | | | Available |
| 4 | VENLAFAXINE SR PELLETS | 30%, 33%, 39% | Capsules | 100mg / 200mg | ORUVAIL | Available |
| 5 | MEBEVERINE HYDROCHLORIDE SR PELLETS | 80.0% | Capsules | 37.5mg | EFFEXOR XR | Available |
| 6 | TAMSULOSIN HCL SR PELLETS | 0.2% | | | | Available |
| 7 | DILTIAZEM HYDROCHLORIDE 54.0%, 40% SR PELLETS | 54.0%, 40% | | | | Available |
| 8 | NIFEDIPINE ER PELLETS | 10% | Capsules | 200mg | Colfac | Available |
| 9 | DOMPERIDONE PELLETS | 13.5%, 19.2% | Capsules | 0.5mg | Flomax | Available |
| 10 | NICARDIPINE SR PELLETS | 20%, 33% | Capsules | 120mg, 240mg | Cartia XT | Available |
| 11 | TOLTERODINE TARTRAT SR PELLETS | 2% | Capsules | 10mg, 20mg | Procardia XL | Available |
| 12 | Nitroglycerin Pellets | 2.40% | Capsules | 10mg | Generic | Available |
| 13 | Mesalamine Pellets | 50% | | | | Available |
| 14 | Didanosine Pellets | 50% | Capsules | 30mg | CARDENE SR® | Available |
| 15 | Gliclazide Pellets | | | | | Available |
| 16 | Trimetazidine Pellets | 35% | Capsules | 2mg | Detrol LA | Available |
| 17 | Theophylline Pellets | 70% | Capsules | | | Available |
| 18 | Tolperisone Pellets | 2% | Capsules | | | Available |



ENTEROSPHERES[®]



Features

- Protect the drug from gastric fluids, to reduce gastric distress caused by drugs particularly irritating to the stomach.
- Spherical pellets with smooth surface.
- Extremely round pellets with different sizes can be produced.
- The process is performed with Spherozizer and extruder.
- Only approved synthetic and natural colors used.
- Pellets are evaluated for assay/drug content, water content, acid resistance and dissolution rate.

Advantage

- Avoidance of high local concentration.
- Useful for the drugs which are unstable at the pH of gastric acid and need to be protected from degradation.
- Facilitate gastrointestinal transit for drugs that are better absorbed from intestine.
- Combination of different release rates of the same drug in a single dosage form.

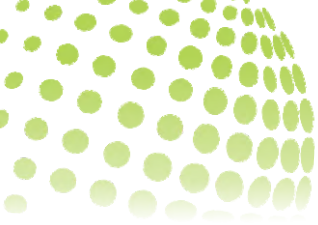
Benefits

- Flexibility in dosage form design and development.
- Packaging in 5 Kg, 25 Kg, 50 Kg drums and 30 Kg in aluminum cartons.
- Available in various colours.
- 0.1 N Hcl 2 hr resistant.

| Sr No. | Product | Strength | Suitable Dosage Form | Dose | Reference Product | API:DMF; Dossier-CTD |
|--------|-------------------------------------|------------------|------------------------|---------------------------|-----------------------|----------------------|
| 1 | DABIGATRAN ETEXILATE W/W PELLETS | 40.0%, 50% | Capsules | 75mg, 110mg, 110mg, 150mg | PARADAXA [®] | Available |
| 2 | ESOMEPRAZOLE EC PELLETS | 15.0%, 27.10% | Capsules | 20mg, 40mg | NEXIUM | Available |
| 3 | ESOMEPRAZOLE MICROPELLETS (MUPS) | 22.5%, 8.5% | Tablets / Sachets | 10mg, 20mg, 40mg | NEXIUM | Available |
| 4 | LANSOPRAZOLE MUPS & PELLETS | 12.5% | ODT Tablets & Capsules | 30mg | Prevacid | Available |
| 5 | LANSOPRAZOLE PELLETS | 8.5% | Capsules | 15mg | Prevacid | Available |
| 6 | OMEPRAZOLE PELLETS | 15.0%, 20%, 8.5% | Capsules | 20mg, 40mg | Dr. Reddy's UK | Available |
| 7 | PANTOPRAZOLE PELLETS | 15%, 22%, 8.5% | Capsules | 20mg, 40mg | Actavis UK | Available |
| 8 | RABEPRAZOLE PELLETS | 15%, 22.5%, 8.5% | Capsules | 10mg, 20mg, 40mg | Milpharm Ltd. | Available |
| 9 | ASPIRIN EC PELLETS | 45%, 60% | Capsules | 75mg | DURLAZA | Available |
| 10 | DULOXETINE HYDROCHLORIDE EC PELLETS | 13.2%, 12%, 20% | Capsules | 20mg | CYMBALTA [®] | Available |
| 11 | OMEPRAZOLE PELLETS | 22.5% | Capsules | 20mg | GENERIC | Available |
| 12 | Dipyridamole pellet | 42.50% | Capsules | | | |

ENZYME PELLETS (Capsules / Tablets)

| Sr No. | Product | Strength | Particle Size | DMF Documentation |
|--------|--|----------|----------------|-------------------|
| 1 | Papain | 50% | 14/20#, 20/40# | ✓ |
| 2 | Pancreatin 10,000 Lipase for 250mg Capsule | 95% | 14/20#, 20/40# | ✓ |
| 3 | Pancreatin 25,000 Lipase for 550mg Capsule | 95% | 14/20#, 20/40# | ✓ |
| 4 | Pancreatin 40,000 Lipase for 750mg Capsule | 95% | 14/20#, 20/40# | ✓ |



IMMEDIATE RELEASE PELLETS



Features

- Rapid dissolution and absorption of drug, which may produce rapid onset of action.
- Only approved synthetic and natural colors used.
- The process is performed with Spherozizer and extruder.
- Extremely round pellets with different sizes can be produced.
- Pellets are evaluated for assay/drug content, water content, acid resistance and dissolution rate.
- Immediate release stomach acid.

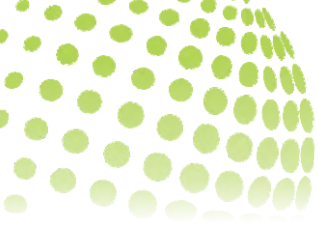
Advantage

- Improved compliance/added convenience
- Improved stability.
- Suitable for controlled/sustained release actives
- Improved solubility of the pharmaceutical composition.
- Ability to provide advantages of liquid medication in the form of solid preparation.
- Pleasing mouth feel, Cost- effective.

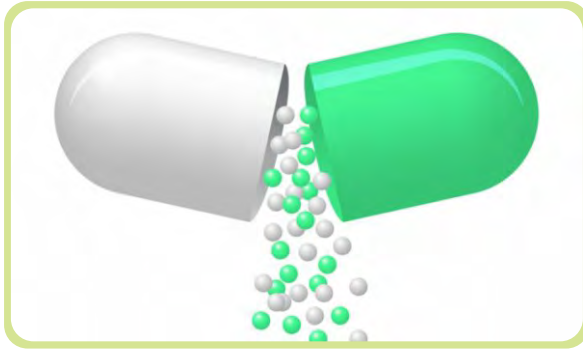
Benefits

- Decreased disintegration and dissolution times for immediate release oral dosage forms.
- Allows high drug loading.
- Packaging in 5 Kg, 25 Kg, 50 Kg drums and 30 Kg in aluminum cartons.

| Sr No. | Product | Strength | Suitable Dosage Form | Dose | Reference Product | API:DMF; Dossier-CTD |
|--------|--|----------------------|----------------------|---------------------|-------------------|----------------------|
| 1 | APREPITANT PELLETS | 43% | Capsules | 40mg, 80mg, 125mg | EMEND | Available |
| 2 | FLUCONAZOLE PELLETS | 20%, 60%, 25% | Capsules | 50mg, 150mg, 200mg | Diflucan® | Available |
| 3 | ITRACONAZOLE PELLETS | 20%, 22%, 30%, 35.0% | Capsules | 100mg, 200mg | SPORANOX® | Available |
| 4 | FLUOXETINE PELLETS | 8%, 33.54% | Capsules | 10mg, 20mg | Prozac | Available |
| 5 | PREGABALIN AND METHYLCOBALAMIN BLENDED PELLETS | 25%, 1.5% | Capsules | 50mg / 0.75mcg | Generic | Available |
| 6 | PREGABALIN PELLETS | 25%, 75% | Capsules | 50mg, 75mg, 150mg | Lyrica | Available |
| 7 | GABAPENTIN PELLETS | 50%, 75% | Capsules | 100mg, 300mg, 400mg | Actavis - UK | Available |
| 8 | ORLISTAT PELLETS | 50% | Capsules | 60mg, 120mg | Xenical | Available |
| 9 | MEBEVERINE HCL IR PELLETS | 40.0% | Capsules | 100mg | Colofac® | Available |
| 10 | DUTASTERIDE PELLETS | 0.25%, 0.5% | Capsules | 0.5mg | Avodart | Available |
| 11 | FENOFIBRATE PELLETS | 66% | Capsules | 150mg, 200mg | Lipofen | Available |
| 12 | AMBROXOL PELLETS | 60.0% | Capsules | 75mg | Ambrox® | Available |
| 13 | INDOMETHACIN PELLETS | 10% | Capsules | 75mg | INDOCIN | Available |



COMBOSPHERES®



Features

- Combospheres offer greater flexibility and design development.
- Both hydrophilic and hydrophobic drug can be encapsulated.
- Extremely round pellets with different sizes can be produced.
- Various stable combination.

Advantage

- Controlled release , gastro-resistant, sustained release drug delivery finds greater advantages.
- Combospheres shows synergistic effects.
- It shows good therapeutic efficacy.

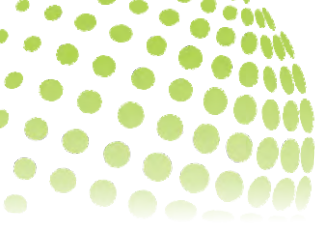
Benefits

- Increased medication compliance.
- Reduced side effects and cost.
- Packaging in 5 Kg, 25 Kg, 50 Kg drums and 30 Kg in aluminum cartons.

| Sr No. | Product | Strength | Suitable Dosage Form | Dose | Reference Product | API:DMF; Dossier-CTD |
|--------|---|----------------|----------------------|---------------------|-------------------|----------------------|
| 1 | Rabeprazole + Domperidone blended pellets | 7.14%, 10.71% | Capsules | 20mg + 30mg SR | GENERIC | Available |
| 2 | Pantoprazole + Domperidone blended pellets | 14.29%, 10.71% | Capsules | 40mg + 30mg SR | GENERIC | Available |
| 3 | Propranolol HCL SR+ Flunarizine blended pellets | 20%, 10%, 26% | Capsules | 40mg SR + 5mg, 10mg | GENERIC | Available |

PROBIOTICS & PREBIOTICS BEADLETS (Temperature Sensitive)

| Sr No. | Product | Strength | Particle Size | DMF Documentation |
|--------|--|-------------|------------------------|-------------------|
| 1 | Prebiotics + Probiotics Delayed Release Beadlets | 20 billion | 14/20#, 16/20#, 20/40# | ✓ |
| 2 | Probiotic Beadlets | 1/2 billion | 14/20#, 16/20#, 20/40# | ✓ |
| 3 | Probiotic Supplement | 10 billion | 14/20#, 16/20#, 20/40# | ✓ |



FLOATING PELLETS



Features

- Float on the suitable liquid media (Stomach acid).
- Different shapes and sizes can be produced according to customer's need.
- Only approved synthetic and natural colors used.
- The process is performed with spherodizer and extruder.
- Two years shelf life.

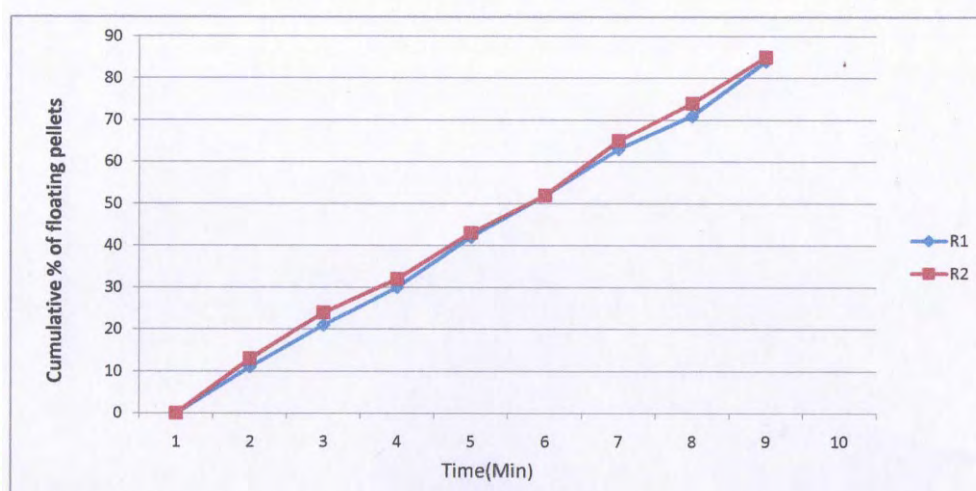
Advantage

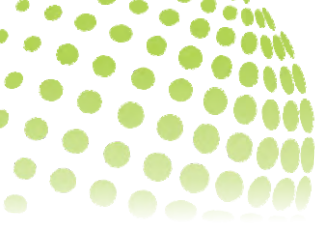
- Enhanced bioavailability.
- Floating pellets float on the solution for prolonged period of time.
- Useful in pharmaceutical and nutraceutical formulations.
- Can be pharmaceutical / nutraceutical beverage drinks.

Benefits

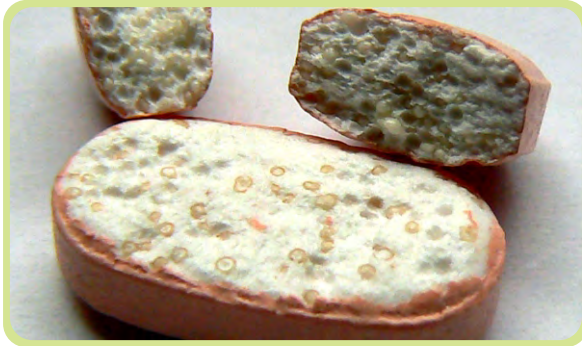
- Packaging in 5 Kg, 25 Kg, 50 Kg drums and 30 Kg in aluminum cartons.
- Available in various colours.
- Better patient compliance.

| Sr No. | Product | Strength | Suitable Dosage Form | Dose | Reference Product | API:DMF; Dossier-CTD |
|--------|---|----------|----------------------|------|-------------------|----------------------|
| 1 | Ziprasidone Floating Pellets | 35% | Capsules | | | Available |
| 2 | Cephalexin Floating Pellets | 50% | Capsules | | | Available |
| 3 | Glipizide Floating Pellets | 50% | Capsules | | | Available |
| 4 | Nizatidine Floating Pellets | 50% | Capsules | | | Available |
| 5 | Branch Chain Amino Acid Pellets 45% w/w | 45% | Capsules | | | Available |
| 6 | L - Leucine pellets 45 % w/w | 45% | Capsules | | | Available |
| 7 | L - Glutamine pellets 45%w/w | 45% | Capsules | | | Available |
| 8 | Caffeine pellets | 45% | Capsules | | | Available |





MULTIPLE UNIT PELLET SYSTEM



Features

- Multi unit pellets more stable plasma profile.
- Pellets are in different size that allow their incorporation in different dosage form.
- Both hydrophobic and hydrophilic actives can be incorporated.
- Cellulose based spheres so they can be stable during tablet compression

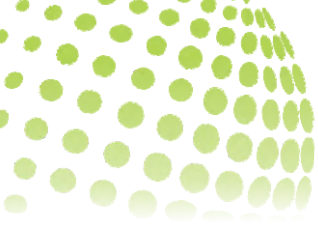
Advantage

- Less irritation of gastro-intestinal tract.
- Lesser dose dumping due to encapsulation.
- Reduce peak plasma fluctuation.
- EC, SR, formulation can be done.

Benefits

- MUPS regulate the drug delivery to improve the quality of therapy.
- Packaging in 5 Kg, 25 Kg, 50 Kg drums and 30 Kg in aluminum cartons.

| Sr No. | Product | Strength | Suitable Dosage Form | Dose | Reference Product | API:DMF; Dossier-CTD |
|--------|---------------------------|----------|----------------------|------|-------------------|----------------------|
| 1 | Omeprazole EC Mups | 25% | Capsules | | | Available |
| 2 | Esomeprazole EC Mups | 22.50% | Capsules | | | Available |
| 3 | Aspirin EC Mups | 60% | Capsules | | | Available |
| 4 | Lansoprazole EC Mups | 13% | Capsules | | | Available |
| 5 | Pancreatin EC Mups | 60% | Capsules | | | Available |
| 6 | Duloxetine EC Mups | 13.20% | Capsules | | | Available |
| 7 | Diclofenac Sodium EC Mups | 50% | Capsules | | | Available |
| 8 | Tolperisone HCL EC Mups | 60% | Capsules | | | Available |
| 9 | Caffeine SR Mups | 50% | Capsules | | | Available |
| 10 | Vitamin-C SR Mups | 50% | Capsules | | | Available |
| 11 | Diclofenac Sodium SR Mups | 50% | Capsules | | | Available |
| 12 | Itopride HCL SR Mups | 60% | Capsules | | | Available |
| 13 | Venlafaxine SR Mups | 40% | Capsules | | | Available |
| 14 | Domperidone SR Mups | 40% | Capsules | | | Available |
| 15 | Ketoprofen SR Mups | 60% | Capsules | | | Available |
| 16 | Metformin SR Mups | 75% | Capsules | | | Available |
| 17 | Ibuprofen SR Mups | 50% | Capsules | | | Available |
| 18 | Mebeverine SR Mups | 50% | Capsules | | | Available |
| 19 | Diltiazem HCL SR Mups | 60% | Capsules | | | Available |
| 20 | Caffeine IR Mups | 50% | Capsules | | | Available |
| 21 | Vitamin-C IR Mups | 50% | Capsules | | | Available |



ORASTRIPS®



Features

- Orostrips Thin and Elegant.
- Shows fast disintegration and dissolution within oral cavity.
- Dose accuracy is good.

Advantage

- Consumer can take the product without need for additional liquid.
- Directly absorbed into systemic circulation.
- No risk of choking, Convenient dosing.
- Artificial sweetener added.

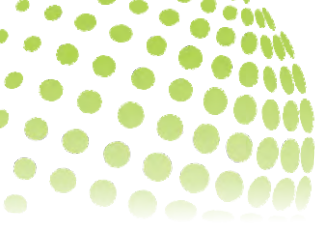
Benefits

- Increase patient compliance.
- Enhanced stability.
- Taste masking of obnoxious drug.

| Sr No. | Product | Strength | Suitable Dosage Form | Dose | Reference Product | API:DMF; Dossier-CTD |
|--------|------------------------|---------------|----------------------|------|-------------------|----------------------|
| 1 | Tadalafil MDF | 10 MG, 20 MG | | | | Available |
| 2 | Sildenafil Citrate MDF | 50 MG, 100 MG | | | | Available |
| 3 | Ondansetron MDF | 2 MG, 4 MG | | | | Available |
| 4 | Montelukast MDF | 10 MG | | | | Available |
| 5 | Caffeine MDF | 50 MG | | | | Available |

NUTRASTRIPS®

| Sr No. | Product | Strength | Suitable Dosage Form | Dose | Reference Product | API:DMF; Dossier-CTD |
|--------|---------------------|----------|----------------------|------|-------------------|----------------------|
| 1 | Caffeine MDF | 50 MG | | | | Available |
| 2 | Folic Acid MDF | 5 MG | | | | Available |
| 3 | Vitamin D3 MDF | 60000 IU | | | | Available |
| 4 | Vitamin Blended MDF | 100 MG | | | | Available |
| 5 | Menthol MDF | 2.5 MG | | | | Available |



SPRAYSPHERES®

NEUTRAL PELLETS



Features

- Inert microgranules based on sucrose and corn starch.
- Only approved synthetic and natural colors used.
- The process is performed with Spherozizer and extruder.
- Extremely round pellets with different sizes can be produced.
- Pellets are evaluated for assay/drug content, water content, acid resistance and dissolution rate.
- Three years shelf life.

Advantage

- The neutral pellets can be used as simple diluents in encapsulation or tableting, they can be coated and loaded with drug substances and imparted with modified release characteristics.
- Minimum humidity content.
- Low friability.

Benefits

- Used in the form of a core in sustained and controlled release formulation in solid oral-dosage forms.
- Packaging in 5 Kg, 25 Kg, 50 Kg drums and 30 Kg in aluminum cartons.
- Various particle sizes for the manufacturer.

Ready to fill Neutral Pellets made from our equipments.

Sprayspheres Sugar Pellets

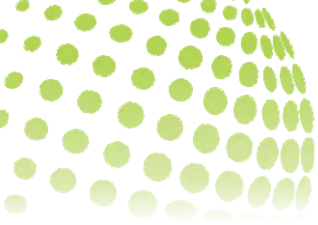
Sugar Pellets are neutral pellets made of sucrose and starch. The almost spherical cores are used as neutral basis for drug layering.

| Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm |
|------------------|----------------|------------------|----------------|------------------|----------------|
| SS 120 - 140# | 0.106 - 0.125 | SS 40 - 50# | 0.300 - 0.425 | SS 20 - 25# | 0.710 - 0.850 |
| SS 100 - 120# | 0.125 - 0.150 | SS 40 - 45# | 0.355 - 0.425 | SS 18 - 20# | 0.850 - 1.000 |
| SS 80 - 100# | 0.150 - 0.180 | SS 35 - 55# | 0.355 - 0.500 | SS 16 - 20# | 0.850 - 1.180 |
| SS 70 - 80# | 0.180 - 0.212 | SS 35 - 50# | 0.300 - 0.500 | SS 16 - 18# | 1.000 - 1.180 |
| SS 60 - 70# | 0.212 - 0.250 | SS 35 - 45# | 0.400 - 0.450 | SS 14 - 16# | 1.180 - 1.400 |
| SS 50 - 60# | 0.250 - 0.300 | SS 35 - 40# | 0.425 - 0.500 | SS 12 - 16# | 1.400 - 1.700 |
| SS 45 - 50# | 0.300 - 0.355 | SS 30 - 35# | 0.500 - 0.600 | SS 12 - 14# | 1.400 - 1.700 |
| SS 45 - 60# | 0.250 - 0.355 | SS 25 - 30# | 0.600 - 0.710 | SS 10 - 12# | 1.700 - 2.000 |
| SS 40 - 60# | 0.250 - 0.425 | | | | |

Sprayspheres Starch Pellets

Used as spherical seed cores for drug layering & film coating. Also used in manufacture of granules / beadlets with sustained / controlled release, taste masking & other special properties.

| Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm |
|------------------|----------------|------------------|----------------|------------------|----------------|
| STS 12 - 14# | 1.400 - 1.700 | STS 30 - 40# | 0.425 - 0.600 | STS 60 - 80# | 0.180 - 0.250 |
| STS 16 - 18# | 1.000 - 1.180 | STS 40 - 50# | 0.300 - 0.425 | STS 80 - 100# | 0.150 - 0.180 |
| STS 18 - 20# | 0.850 - 1.000 | STS 50 - 60# | 0.250 - 0.300 | STS 100 - 200# | 0.075 - 0.150 |
| STS 20 - 30# | 0.600 - 0.850 | | | | |



SPRAYSPHERES®

NEUTRAL PELLETS

Sprayspheres MCC Pellets

As a neutral starter core and optimal carrier for multiparticulate controlled release formulation by layering and coating. Highly spherical, high mechanical strength with low friability.

| Grade | Particle Size Range (µm) | Grade | Particle Size Range (µm) | Grade | Particle Size Range (µm) |
|----------|--------------------------|----------|--------------------------|-----------|--------------------------|
| MS - 100 | 75 - 212 | MS - 203 | 150 - 300 | SMS - 507 | 500 - 710 |
| MS - 102 | 106 - 212 | MS - 305 | 300 - 500 | MS - 708 | 710 - 850 |

Sprayspheres Calcium Carbonate Pellets

These pellets are highly spherical particles optimized for coating and layering process to achieve reproducible product characteristic. In extended release formulation this pellets can be integrated to reduce the pH dependency of the drug release therefore achieve desired dissolution profile.

| Grade | Particle Size Range (µm) | Grade | Particle Size Range (µm) | Grade | Particle Size Range (µm) |
|----------|--------------------------|----------|--------------------------|-----------|--------------------------|
| MS - 100 | 75 - 212 | MS - 203 | 150 - 300 | SMS - 507 | 500 - 710 |
| MS - 102 | 106 - 212 | MS - 305 | 300 - 500 | MS - 708 | 710 - 850 |

Ready to fill Neutral Pellets made from our equipments.

Sprayspheres Tartaric Acid Pellets

These profile are highly spherical particles optimized for coating and layering process to achieve reproducible product characteristic in extended release formulation this pellets can be integrated to reduce the pH dependency of the drug release therefore achieve desired dissolution profile.

| Particle Size Range (µm) | Diameter In mm | Particle Size Range (µm) | Diameter In mm | Particle Size Range (µm) | Diameter In mm |
|--------------------------|----------------|--------------------------|----------------|--------------------------|----------------|
| TS 20 - 30# | 0.600 - 0.850 | TS 50 - 60# | 0.250 - 0.300 | TS 60 - 80# | 0.150 - 0.180 |
| TS 30 - 40# | 0.425 - 0.600 | TS 50 - 60# | 0.180 - 0.250 | TS 100 - 200# | 0.075 - 0.150 |
| TS 40 - 50# | 0.300 - 0.425 | | | | |

Sprayspheres Mannitol Pellets

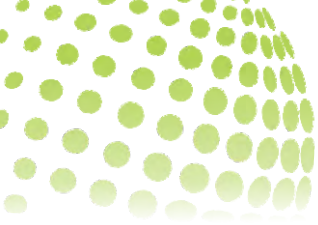
As a water soluble starter cores for drug layering and coating in the formulation of pellets system be it for immediate or sustained release.

| Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm |
|------------------|----------------|------------------|----------------|------------------|----------------|
| MAS 18 - 20# | 0.850 - 1.000 | MAS 40 - 50# | 0.300 - 0.425 | MAS 80 - 100# | 0.150 - 0.180 |
| MAS 20 - 30# | 0.600 - 0.850 | MAS 50 - 60# | 0.250 - 0.300 | MAS 100 - 200# | 0.075 - 0.150 |
| MAS 30 - 40# | 0.425 - 0.600 | MAS 60 - 80# | 0.180 - 0.250 | | |

Sprayspheres Silica Pellets

Mainly used as core for drug loading of insoluble and in stable drug. Also used in MUPS technology.

| Grade | Particle Size Range (µm) | Grade | Particle Size Range (µm) | Grade | Particle Size Range (µm) |
|----------|--------------------------|----------|--------------------------|----------|--------------------------|
| AS - 100 | 75 - 212 | AS - 203 | 150 - 300 | AS - 507 | 500 - 710 |
| AS - 102 | 106 - 212 | AS - 305 | 300 - 500 | AS - 708 | 710 - 850 |



SPRAYSPHERES®

NEUTRAL PELLETS



Sprayspheres Lactose Pellets

Used as spherical seed cores for drug layering & film coating. Also used in manufacture of granules / beadlets with sustained / controlled release, taste masking and other special properties.

| Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm |
|------------------|----------------|------------------|----------------|------------------|----------------|
| LS 18 - 20# | 0.850 - 1.000 | LS 40 - 50# | 0.300 - 0.425 | LS 80 - 100# | 0.150 - 0.180 |
| LS 20 - 30# | 0.600 - 0.850 | LS 50 - 60# | 0.250 - 0.300 | LS 100 - 200# | 0.075 - 0.150 |
| LS 30 - 40# | 0.425 - 0.600 | LS 60 - 80# | 0.180 - 0.250 | | |

Sprayspheres Lactose + MCC Pellets

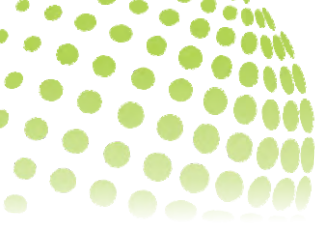
Used as spherical seed cores for drug layering & film coating. Also used in manufacture of granules / beadlets with sustained / controlled release, taste masking and other special properties.

| Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm |
|------------------|----------------|------------------|----------------|------------------|----------------|
| LM 18 - 20# | 0.850 - 1.000 | LM 40 - 50# | 0.300 - 0.425 | LM 80 - 100# | 0.150 - 0.180 |
| LM 20 - 30# | 0.600 - 0.850 | LM 50 - 60# | 0.250 - 0.300 | LM 100 - 200# | 0.075 - 0.150 |
| LM 30 - 40# | 0.425 - 0.600 | LM 60 - 80# | 0.180 - 0.250 | | |

Ready to fill Neutral Pellets made from our equipments.

Sprayspheres Citric Acid Pellets

| Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm | Mesh Size (ASTM) | Diameter In mm |
|------------------|----------------|------------------|----------------|------------------|----------------|
| STS 12 - 14# | 1.400 - 1.700 | STS 18 - 20# | 0.850 - 1.000 | STS 30 - 40# | 0.425 - 0.600 |
| STS 16 - 18# | 1.000 - 1.180 | STS 20 - 30# | 0.600 - 0.850 | STS 40 - 50# | 0.300 - 0.425 |



TECHNOLOGY TRANSFER & EQUIPMENTS SUSTAINED RELEASE PELLETS



Features

- Spherical shape and smooth surface.
- Extremely round pellets with different sizes can be produced.
- The process is performed with spherodizer and extruder.
- Only approved synthetic and natural colors used.
- Pellets are evaluated for assay/ drug content, water content, acid resistance and dissolution rate.
- Two years shelf life.

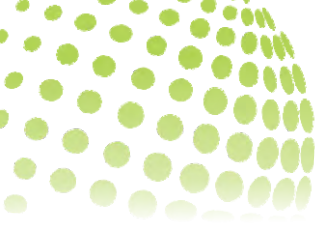
Advantage

- Uniform release of drug substance over time.
- Reduction in frequency of intakes.
- Reduced adverse side effects.
- Taste masking problem is also solved.
- Better patient compliance.
- More stable and cost effective.

Benefits

- Prolonged therapeutic effect by continuously releasing medication over an extended period of time after administration of a single dose of the drug.
- Pellets flow freely and are easy to pack without significant difficulties (resulting in uniform and reproducible fill weight of capsules).
- Pellets are less susceptible to dose dumping.
- It reduces accumulation of drugs especially proven advantageous in the case of irritating drugs.

| Sr No. | Product | Strength | Particle Size | Therapeutic Uses |
|--------|---------------------------------|----------------------|----------------|--------------------------|
| 1 | Diclofenac sodium SR Pellets | 50% | 14/20# | NSAID |
| 2 | Diclofenac Potassium SR Pellets | 50% | 14/20# | NSAID |
| 3 | Diltiazem SR Pellets | 80% & 50% | 14/20# | Anti-Hypertensive |
| 4 | Itopride SR Pellets | 50% & 60% | 16/20# | Gastric-prokinetic |
| 5 | Propanol SR Pellets | 40% | 14/20# | Anti-Hypertensive |
| 6 | Venlafaxine SR Pellets | 40% | 14/20# | Anti Depressant |
| 7 | Mebeverine SR Pellets | 50% | 14/20# | Anti Spasmodic |
| 8 | Theophylline SR Pellets | 50% | 14/20# | Cold,Cough & Respiratory |
| 9 | Nitroglycerin SR Pellets | 1.6%, 2.1% & 2.5% | 18/30# | Anti-Hypertensive |
| 10 | Tamsulosin SR Pellets | 0.2% & 0.16% & 0.20% | 16/20# | BPH |
| 11 | Domperidone SR Pellets | 40% | 14/20# | Anti-Emetics |
| 12 | Gliclazide SR Pellets | 25% | 14/20#, 16/20# | Type 2 diabetes |
| 13 | Ketoprofen SR Pellets | 60% & 65% | 14/20#, 16/20# | Anti-Inflammatory |
| 14 | Metformin SR Pellets | 75% | 14/20#, 16/20# | Anti-diabetic |
| 15 | Ibuprofen SR Pellets | 85% & 85.6% | 14/20# | Anti-Inflammatory |



TECHNOLOGY TRANSFER & EQUIPMENTS SUSTAINED RELEASE PELLETS



Features

- Spherical shape and smooth surface.
- Extremely round pellets with different sizes can be produced.
- The process is performed with spherodizer and extruder.
- Only approved synthetic and natural colors used.
- Pellets are evaluated for assay/ drug content, water content, acid resistance and dissolution rate.
- Two years shelf life.
- Technology transfer stability DMF Dossage

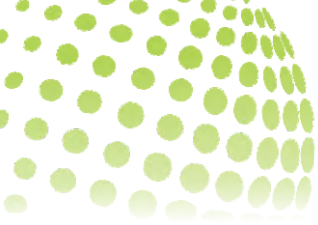
Advantage

- Uniform release of drug substance over time.
- Reduction in frequency of intakes.
- Reduced adverse side effects.
- Taste masking problem is also solved.
- Better patient compliance
- More stable and cost effective.
- Product 3 batches.

Benefits

- Prolonged therapeutic effect by continuously releasing medication over an extended period of time after administration of a single dose of the drug.
- Pellets flow freely and are easy to pack without significant difficulties (resulting in uniform and reproducible fill weight of capsules).
- Pellets are less susceptible to dose dumping.
- It reduces accumulation of drugs especially proven advantageous in the case of irritating drugs.

| Sr No. | Product | Strength | Particle Size | Therapeutic Uses |
|--------|-----------------------------------|---------------------|----------------|-------------------------------|
| 17 | Tolterodine L-Tartrate SR Pellets | 2% | 14/20# | Anti-BPH |
| 18 | Tramadol SR Pellets | 0.75% / 1.5% & 2.1% | 16/20# | Urinary Antispasmodic |
| 19 | Trimetazidine SR Pellets | 60% | 14/20# | Analgesic |
| 20 | Tizanidine SR Pellets | 35% | 14/20# | Anti-Hyper Liporotienemics |
| 21 | Ambroxol SR Pellets | 4% | 14/20# | Anti-Inflammatory |
| 22 | Sabutamol Sulphate SR Pellets | 25% | 14/20# | Cold, Cough & Respiratory |
| 23 | Tolperisone HCL SR Pellets | 8% | 14/20# | Cold, Cough & Respiratory |
| 24 | CPM SR Pellets | 50% | 30/60# | Muscle Relaxant/Pain |
| 25 | Levosulpiride SR Pellets | 8% | 16/20# | Cold, Cough & Respiratory Use |
| 26 | Indomethacin SR Pellets | 50% | 14/20# | Anxiety Disorders |
| 27 | Ascorbic Acid SR Pellets | 50% | 14/20# | NSAID |
| 28 | Aceclofenac SR Pellets | 50% | 14/20# | Vitamin-C |
| 29 | Ambroxol SR Pellets | 50% | 16/20# | NSAID |
| 30 | Nifedipine SR Pellets | 50% | 14/20# | Respiratory Diseases |
| 31 | Mosapride SR Pellets | 30% | 16/20# | Anti-Hypertensive |
| 32 | Allopurinol SR Pellets | 12.50% | 14/20# | Gastroprokinetic |
| 33 | Cyclobenzaprine SR Pellets | 30% | 14/20#, 16/20# | Anti-gout |
| 34 | Metoprolol Succinate SR Pellets | 10% & 22 % | 14/20#, 16/20# | Muscle Relaxant |
| 35 | Iterodine SR Pellets | 66% | 14/20# | Anti-Hypertensive |



TECHNOLOGY TRANSFER & EQUIPMENTS

IMMEDIATE RELEASE PELLETS



Features

- Rapid dissolution and absorption of drug, which may produce rapid onset of action.
- Only approved synthetic and natural colors used.
- The process is performed with Spherodizer and extruder.
- Extremely round pellets with different sizes can be produced.
- Pellets are evaluated for assay/drug content, water content, acid resistance and dissolution rate.

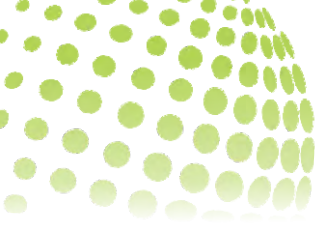
Advantage

- Improved compliance/added convenience.
- Improved stability.
- Suitable for controlled/sustained release actives
- Improved solubility of the pharmaceutical composition.
- Ability to provide advantages of liquid medication in the form of solid preparation.
- Pleasing mouth feel, Cost- effective.

Benefits

- Decreased disintegration and dissolution times for immediate release oral dosage forms.
- Allows high drug loading.
- Packaging in 5 Kg, 25 Kg, 50 Kg drums and 30 Kg in aluminum cartons.

| Sr No. | Product | Strength | Particle Size | Therapeutic Uses |
|--------|------------------------------|------------|----------------|------------------------------|
| 1 | Aspirin IR Pellets | 50% | 16/20#, 14/20# | NSAID |
| 2 | Atorvastatin IR Pellets | 50% | 14/20# | Ant-Hyper Liporotienemics |
| 3 | Caffeine IR Pellets | 50% | 16/20#, 14/20# | CNS Stimulant |
| 4 | Carbonyl Iron IR Pellets | 50% | 16/20#, 14/20# | Vitamin's & Iron |
| 5 | Citirizine HCL IR Pellets | 3.50% | 14/20# | Antihistamine |
| 6 | Clopidogrel IR Pellets | 50% | 14/20# | Anti Coagulants |
| 7 | CPM+Phenylephrine IR Pellets | 8MG + 25MG | 14/20# | Antihistamine |
| 8 | Diclofenac Sodium IR Pellets | 50% | 14/20#, 16/20# | NSAID |
| 9 | Didanosine IR Pellets | 50% | 14/20#, 16/20# | Anti-HIV |
| 10 | Domperidone IR Pellets | 20% | 14/20#, 16/20# | Anti-Emetic |
| 11 | Dutasteride IR Pellets | 0.63% | 14/20#, 16/20# | Benign Prostatic Hyperplacia |
| 12 | Ezetimibe IR Pellets | 10% & 20% | 16/20# | Lipid Lowering Agent |
| 13 | Fenofibrate IR Pellets | 66% | 14/20# | Anti-Cholinergic |
| 14 | Fluconazole IR Pellets | 41.60% | 14/20# | Anti-Fungal |
| 15 | Itraconazole IR Pellets | 22% | 14/20# | Anti-Fungal |
| 16 | Loratidine IR Pellets | 5% | 16/20# | Anti-Histamine |



TECHNOLOGY TRANSFER & EQUIPMENTS

IMMEDIATE RELEASE PELLETS



Features

- Rapid dissolution and absorption of drug, which may produce rapid onset of action.
- Only approved synthetic and natural colors used.
- The process is performed with Spherozizer and extruder.
- Extremely round pellets with different sizes can be produced.
- Pellets are evaluated for assay/drug content, water content, acid resistance and dissolution rate.

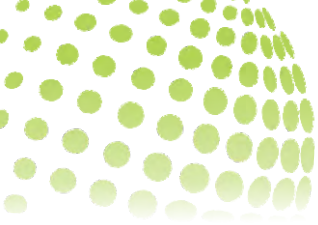
Advantage

- Improved compliance/added convenience.
- Improved stability.
- Suitable for controlled/sustained release actives
- Improved solubility of the pharmaceutical composition.
- Ability to provide advantages of liquid medication in the form of solid preparation.
- Pleasing mouth feel, Cost- effective.

Benefits

- Decreased disintegration and dissolution times for immediate release oral dosage forms.
- Allows high drug loading.
- Packaging in 5 Kg, 25 Kg, 50 Kg drums and 30 Kg in aluminum cartons.

| Sr No. | Product | Strength | Particle Size | Therapeutic Uses |
|--------|--|--------------|-----------------|---------------------------------|
| 17 | Methyl Cobalamin IR Pellets | 3% | 16/20# | Multivitamin |
| 18 | Montelukast Sodium IR Pellets | 5% | 16/20# | Leukotriene Receptor Antagonist |
| 19 | Orlistat IR Pellets | 50% | 14/20# | Anti-Obesity |
| 20 | Piroxicam IR Pellets | 9% & 10% | 14/20# | NSAID |
| 21 | Rosuvastatin Calcium IR Pellets | 10% | 14/20# | Anti-Hyper Lipoproteinemics |
| 22 | Salbutamol IR Pellets | 10% | 16/20# | Anti-Histamine |
| 23 | Dabigatran Etexilate Mesylate IR Pellets | 44% | 16/20# | Anti Coagulant |
| 24 | Levocetirizine Dihydrochloric IR Pellets | 5% | 16/20# | Antihistamine |
| 25 | Folic Acid IR Pellets | 3%, 5% | 16/20#, 60/100# | Anti Anaemic |
| 26 | Tacrolimus IR Pellets | 1% | 16/20# | Immune Suppressant |
| 27 | Dutasteride IR Pellets | 0.25% & 0.5% | 16/20# | BPH |
| 28 | Fenofibrate IR Pellets | 50% | 14/20#, 16/20# | Lipid Lowering Agent |
| 29 | Mebeverine IR Pellets | 50% | 14/20#, 16/20# | Anti-Spasmotic |
| 30 | Aprepitant IR Pellets | 35%, 40% | 14/20#, 16/20# | Antiemetic |
| 31 | Celecoxib IR Pellets | 50% | 14/20#, 16/20# | NSAID |
| 32 | Everolimus IR Pellets | 10% | 14/20#, 16/20# | Breast Cancer |
| 33 | Tartaric Acid IR Pellets | 95% | 16/20#, 20/30# | |
| 34 | Tramadol IR Pellets | 60% | 14/20#, 16/20# | Analgesic |
| 35 | Metformin IR Pellets | 50% | 14/20#, 16/20# | Anti-Diabetic |



TECHNOLOGY TRANSFER & EQUIPMENTS

ENTERIC COATED PELLETS



Features

- Protect the drug from gastric fluids, to reduce gastric distress caused by drugs particularly irritating to the stomach.
- Spherical pellets with smooth surface.
- Extremely round pellets with different sizes can be produced.
- The process is performed with Spheridizer and extruder.
- Only approved synthetic and natural colors used.
- Pellets are evaluated for assay/drug content, water content, acid resistance and dissolution rate.

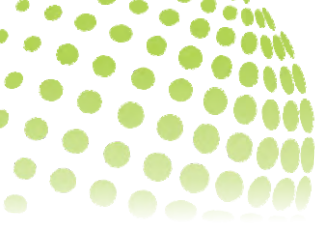
Advantage

- Avoidance of high local concentration.
- Useful for the drugs which are unstable at the pH of gastric acid and need to be protected from degradation.
- Facilitate gastrointestinal transit for drugs that are better absorbed from intestine
- Combination of different release rates of the same drug in a single dosage form.

Benefits

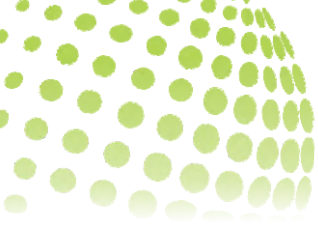
- Flexibility in dosage form design and development.
- Packaging in 5 Kg, 25 Kg, 50 Kg drums and 30 Kg in aluminum cartons.
- Available in various colours.

| Sr No. | Product | Strength | Particle Size | Therapeutic Uses |
|--------|----------------------------------|------------------------|------------------|------------------|
| 1 | Aspirin EC Pellets | 30%, 43%, 50% & 65% | 16/20#, 14/20# | NSAID |
| 2 | Diclofenac Sodium EC Pellets | 30%, 40% & 50% | 14/20# | Analgesic |
| 3 | Duloxetine EC Pellets | 13.20% | 14/20# | Anti-Depressant |
| 4 | Erythromycin Stearate EC Pellets | 52% | 16/20# | Antibiotic |
| 5 | Esomeprazole EC Pellets | 8.5% & 22.5% | 16/20# | Antihistamine |
| 6 | Fluconazole EC Pellets | 40% | 14/20# | Anti-Infective |
| 7 | Lansoprazole EC Pellets | 7.5%, 8.5% & 11.5% | 14/20#, 16/20# | Anti-Ulcerative |
| 8 | Omeprazole EC Pellets | 7.5%, 8.5% & 11.5% | 14/20#, 16/20# | Anti-Ulcerative |
| 9 | Pantoprazole EC Pellets | 20% | 14/20#, 16/20# | Anti-Ulcerative |
| 10 | Rabeprazole EC Pellets | 11.5%, 15% & 20% | 14/20#, 16/20# | Anti-Ulcerative |
| 11 | Dexlansoprazole EC Pellets | 22% | 16/20# | Anti-Ulcerative |
| 12 | Pancreatin EC Pellets | 10,000, 25,000, 40,000 | 14/20#, & 30/60# | Digestant |
| 13 | Esomeprazole Mg EC Pellets | 8.5%, 11.5% & 22.5% | 16/20# | Anti-Ulceratives |
| 14 | Diclofenac Potassium EC Pellets | 30% & 40% | 14/20#, 16/20# | NSAID |
| 15 | Dexrabeprazole EC Pellets | 6.30% | 16/20# | Anti-Ulceratives |
| 16 | Fluoxetine EC Pellets | 35% & 50% | 14/20# | AntiDepressant |



BRAND ASSOCIATED WITH US





GLOBAL PRESENCE



Connect With Us

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