

## Pellets from Apex Pharma

High-quality pharmaceutical pellets are commonly used in drug delivery systems, offering controlled or sustained release of medication. They are typically made with active pharmaceutical ingredients (APIs) and excipients, processed through various methods like extrusion, spheroidization, or layering. Here's a list of different types of pharmaceutical pellets and examples of formulations or products commonly used in the industry:

### 1. Immediate Release Pellets

- **Characteristics:** Designed for fast dissolution and rapid onset of action.
- **Example Products:**
  - Paracetamol Pellets
  - Ibuprofen Pellets
  - Diphenhydramine Hydrochloride Pellets

### 2. Sustained Release (SR) Pellets

- **Characteristics:** Provide a controlled, prolonged release of the drug over time.
- **Example Products:**
  - Metoprolol Tartrate SR Pellets
  - Diltiazem SR Pellets
  - Carbamazepine SR Pellets

### 3. Controlled Release (CR) Pellets

- **Characteristics:** Gradually release the drug at a consistent rate.
- **Example Products:**
  - Bupropion CR Pellets
  - Theophylline CR Pellets
  - Methylphenidate CR Pellets

### 4. Enteric-Coated Pellets

- **Characteristics:** Coated with materials that resist gastric acids, releasing the drug in the intestines.
- **Example Products:**
  - Omeprazole Enteric-Coated Pellets
  - Lansoprazole Enteric-Coated Pellets
  - Mesalamine Enteric-Coated Pellets

## 5. Multiparticulate Formulations (MFF)

- **Characteristics:** Consist of multiple small pellets, providing a more uniform and flexible release profile.
- **Example Products:** ○ Pantoprazole MFF ○ Diclofenac MFF ○ Venlafaxine MFF

## 6. Matrix-Based Pellets

- **Characteristics:** Made by encapsulating the drug in a matrix that controls the release rate.
- **Example Products:**
  - Baclofen Matrix Pellets ○ Tramadol Matrix Pellets ○ Naproxen Matrix Pellets

## 7. Combination Release Pellets

- **Characteristics:** A mix of immediate release and controlled or sustained release in the same pellet.
- **Example Products:**
  - Oxycodone/Acetaminophen Combination Pellets ○ Lisinopril/HCTZ Combination Pellets ○ Fluoxetine/Olanzapine Combination Pellets

## 8. Targeted Release Pellets

- **Characteristics:** Designed for specific release in certain parts of the gastrointestinal tract.
- **Example Products:**
  - 5-Aminosalicylic Acid Targeted Release Pellets (for inflammatory bowel diseases)
  - Prednisone Targeted Release Pellets

## 9. Biodegradable Pellets

- **Characteristics:** Pellets made with biodegradable polymers, used for drug delivery in specialized applications.
- **Example Products:**
  - Goserelin Acetate Biodegradable Pellets
  - Leuprolide Acetate Biodegradable Pellets

## 10. Coated Beads/Pellets for Taste Masking

- **Characteristics:** Pellets are coated to mask the unpleasant taste of bitter drugs.

- **Example Products:**
  - **Caffeine Pellets**
  - **Chlorpheniramine Maleate Pellets**