

Physical Stability Test Parameters in Dosage Forms

- **Solutions**
 - Organoleptic tests
(appearance, clarity and sedimentation)
 - Subjective appearance tests
(color, smell)
 - Quantity determination,
impairment products
 - pH
 - Chemical microbiological tests
 - Microbiological assays,
protective content and activity

- **Parenteral Solutions**

- Appearance
- The precipitates
- Crystalline fibers
- Blur time
- Quantity determination, impairment products
- pH
- Microbiological assays, protective content and activity
- Particulate contamination
- sterility
- Pyrogenity

Suspensions

- Rheological Properties
- Sedimentation volume and velocity
- Resuscitation
- Protective stability
- Particle size and distribution
- pH
- Microbiological assays, protective content and activity
- Quantity determination, impairment products

Emulsions

- Appearance
- Emulsion interface
- Globe size and viscosity
- Stability of emulsifying agent / protective colloid system
- Emulsion type
- Rheological properties
- Appearance of the emulsion system
- Separation and coalescence

Semi-Solid Preparations

- Homogeneity (phase separation, crystal growth, drying due to water loss, separation of water)
- viscosity
- Particle size and distribution
- Weight loss

Transdermal preparations

- Adhesion-breaking power
- Active substance release rate
- Subjective appearance tests
- Quantity determination, impairment products
- Infiltration

Powders

- Appearance
- Moisture
- Dissolution, dissolution behavior
- Quantity determination and degradation products

Tablets

- Tablet hardness
- Softening
- Dispersion
- The porosity of tablets
- Dissolution
- Dissolution medium
- In-vivo in-vitro correlation
- Stability of dissolution curves
- Appearances of tablets and capsules

- Extended release products
- Coated beads and granules
- Erosion tablets
- Insoluble matrices
- Osmotic pump
- Gel forms

- Coated tablets
 - Film-coated tablets
 - Sugar coated tablets
 - Enteric coated tablets
- Hard and Soft Capsules
- The microcapsules