



Pre-Filled Syringes

Convenient, safe & efficient

As a way of supplying solutions for injection, pre-filled syringes (PFS) have several advantages over conventional vials. PFS make application of the drug product safer and more convenient for physicians as well as self-administration while enjoying an excellent market acceptance. PFS are also a system of choice for cost-intensive drugs by optimizing product yield. Fresenius Kabi Product Partnering offers you services and expertise for manufacturing your product in PFS and has the flexibility to accommodate the needs of your product.

1) Formats

- Glass and plastic PFS
- Depending on materials and size, PFS can be supplied with Luer cone, Luer Lock, or staked needle
- 0.5 mL-50 mL PFS
- Qualified suppliers



2) Critical quality attributes of your product

- Oxygen sensitive
- High viscosity
- Light sensitive
- Water-based solutions and water-free products
- Emulsions and suspensions
- Biological products, hormones
- Small molecules
- High-potency compounds



3) Filling process

- Use of sterile primary packaging components
- Nested syringes, ready-to-fill
- Closed RABS
- Stoppering with vacuum or positioning pipe
- Option for aseptic and non-aseptic filling of all formats available
- Use of dedicated equipment if required



4) Safety devices

Working with our suppliers, we can implement different safety needle devices that best match your target product profile.

5) Secondary packaging

- Cardboard boxes
- Pouches with/without oxygen protection
- Blisters with/without oxygen absorber
- As bulk product in tubs
- Serialization to be implemented

6) Supply for assembly in auto-injectors

For assembly of PFS in auto-injectors at a third party, we can supply PFS as bulk products with PFS placed in tubs.

We have already successfully launched several products and have numerous third-party projects in the pipeline with globally respected customers from the pharmaceutical industry.