

Polyether 127 (F127)

Product component

Item	character	Package Size	备注
F127	White powder	10 g/bottle	Keep in dark

This instruction applies to EFL-127

$$H \leftarrow O \rightarrow O \rightarrow OH$$
 $99 \qquad 67 \qquad 99$

F127 molecular structure

Product introduction

Polyether F127 (F127) is a triblock copolymer of polyethylene glycol-polypropylene glycol-polyethylene glycol. F127 has excellent thermogenic gel (warming gel) characteristics and good biosafety, and the material system based on F127 can be applied in the biomedical field, such as drug carrier, wound dressing, cell carrier shear protector, bio 3D printing, etc.

Application

Thermogenic hydrogels, injectable hydrogels, drug carriers, biological 3D printing, tissue engineering, etc

Storage

Dry kit: room temperature, 24 months. Please note that repeated freezing and thawing of the solution will affect the performance of the product, so it is best to prepare it when using it.

Period of validity

The date of manufacture is shown in the package.

Scan the QR code on the right for more information



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Use concentration

When used as a thermogenic gel, it is recommended that F127 be used at a concentration of $20\sim30\%$ w/v, that is $200\sim300$ mg/mL;

When used as a surfactant, the recommended concentration of F127 is 0.5-2% w/v, that is $5\sim 20$ mg/mL.

Solution preparation

- (1) Take the required mass of F127 into thecentrifugal tube;
- (2) Dissolve at 2~8°C for 0.5~2h, shaking several times.

About thermogenic gels

F127 solution of 20~30% w/v can be cured into a reversible thermogenic gel when placed at a temperature higher than 30 °C. The temperature or concentration of the solution can improve the gel strength.

Illustration:

F127 solution has the characteristics of thermogenic gel (warming gel). During the preparation of solution, when **the concentration is** ≤ **15%**, **it can be dissolved by stirring at room temperature**, and cooling is conducive to dissolution. When the concentration is > 15%, it is recommended to stand and dissole at 2-8°C, shaking several times with the vortex mixer.

F127 solution with a high concentration can be **gelatinize** when standing at room **temperature**. The higher the concentration, the easier it is to gelatinize. The gel at this time is **physically reversible**, when the temperature is reduced to 2~8 °C, the solution return to the solution state.