

## Penicillin G Sodium Salt

**CAT N°** : P0018

**CAS N°** : 69-57-8

**Molecular weight** : 356.37 g/mol

**Chemical formula** :  $C_{16}H_{17}N_2NaO_4S$

**Storage conditions** : +2°C to +8°C

**Shelf life** : 36 months

| Tests                            | Specifications            |
|----------------------------------|---------------------------|
| Appearance                       | White to off-white powder |
| Moisture                         | Max 1.5%                  |
| Potency                          | Min 1645 $\mu$ /mg        |
| Purity (HPLC on anhydrous basis) | Min 98%                   |
| Specific rotation                | +285° to +310°            |
| pH                               | 5.5 – 7.5                 |

### Solubility and solution stability :

This product is soluble in water (100 mg/ml).  
Solutions should be stable for 3 days at 37°C.

### Recommended use :

In tissue culture, the suggested working concentration is 100 000 units/litre

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store the product in a dry area
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)
- Protect the product from any form of humidity
- Use, in one time, after opening, the entire quantity of product of the container, without making a concentrated solution (to avoid the formation of precipitates). If it is not possible, close the container immediately after sampling the quantity of powder required.

The product is intended to be used in vitro, in laboratory only. Do not use it in therapy, human or veterinary applications.

### Application :

This product is an antibiotic, which inhibits the final stages of bacteria cell wall synthesis. It inhibits primarily Gram-positive bacteria.