

## Penicillin G Sodium Salt

**CAT N°:** PM-A4218

**CAS N°:** 69-57-8

**Molecular weight:** 356.37 g/mol

**Chemical formula:** C<sub>16</sub>H<sub>17</sub>N<sub>2</sub>NaO<sub>4</sub>S

**Colour:** White to off-white crystalline powder

**Storage conditions:** +2°C to +8°C

**Shelf life:** 36 months

### Tests and Specifications:

- pH: 6.5 ± 1
- Endotoxin: <0.16 IU/mg
- Assay: > 96%
- Loss on drying: < 1%
- Potency: ≥ 1645 IU/mg
- Specific rotation: +297.8° ± 12.5°

### 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 for research or further manufacturing only and not for use as an Active Pharmaceutical Ingredient or food or animal feed.

**Application:**

This product is an antibiotic, which inhibits the final stages of bacteria cell wall synthesis. It inhibits primarily Gram-positive bacteria. Cells in log phase may require three to seven days for selection. In general, concentrations of approximately 400µg/ml for selection and 200µg/ml for maintenance are required for mammalian cells.