

Technical Data Sheet

12/07/2017

Sodium Chloride Salt Solution 0.85%

Product code: LM-S2047

<u>Colour</u>: clear solution

Storage conditions: Room temperature, protected from light

Shelf life: 48 months

Sterility tests:

Bacteria in aerobic and anaerobic conditions

- Fungi and yeasts

Endotoxin: <1 EU/ml

Recommended use:

- Respect storage conditions of the product
- Do not use the product after its expiry date
- Store product in an area protected from light (not necessary for saline solutions).
- Manipulate the product in aseptic conditions (e.g.: under laminar air flow)
- Wear clothes adapted to the manipulation of the product to avoid contamination (e.g. : gloves, mask, hygiene cap, overall...)

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

Description:

The product is a saline solution at 0.85% prepared with water used for cell culture. The sodium chloride is a source of chlorine and sodium necessary to the production of components like sodium carbonate, sodium hydroxide or chlorate ions.



Use:

The sodium chloride is widely used for biochemistry researches and molecular biology. This solution can be used for the realisation of phosphate buffer or SSC buffer (sodium chloride – sodium citrate), and also for the preparation of plasmidic DNA (removing of small fragments of nucleic acids) and for the precipitation of the DNA of samples containing SDS. The sodium chloride is also used in the chemical sequencing of DNA. [1] and for protein crystallisation [2,3,4,5]

Indications of deterioration:

Solution should be clear and free of particulate and flocculent material. Do not use if solution is cloudy or contains precipitate.

- [1]: Molecular Cloning: A Laboratory Manual, 3rd ed., Sambrook, J. F., et al., Cold Spring Harbor Laboratory Press (Cold Spring Harbor, NY: 2001), pp. 1.78-1.79, 2.71-2.75, 6.19-6.20, 6.24-6.25, 6.26, 12.23, 12.61-12.65, 16.43, A8.12.
- [2]: Curtis, R. A., et al., Hydrophobic forces between protein molecules in aqueous solutions of concentrated electrolyte. Biophys. Chem., **98(3)**, 249-265 (2002).
- [3]: Smith, B. S., et al., Crystallization and preliminary X-ray analysis of ferric enterobactin receptor FepA, an integral membrane protein from *Escherichia coli*. Acta Crystallogr. D Biol. Crystallogr., **54 (Pt 4)**, 697-699 (1998).
- [4]: Discipio, R. G., et al., Crystallization of human complement component C5. Acta Crystallogr. D Biol. Crystallogr., **54** (Pt 4), 643-646 (1998).
- [5]: Solovyova, A., et al., Non-ideality by sedimentation velocity of halophilic malate dehydrogenase in complex solvents. Biophys. J., **81(4)**, 1868-1880 (2001).