



GUINAMA. Laboratory distributor of raw materials for the pharmaceutical and cosmetic industries.

Type of document:

TECHNICAL DATA SHEET

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4.0

11267-COLISTIN SULPHATE

1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION.

1.1 Identification of the substance or preparation.

Name: Colistin Sulphate

Bulk code: 11267

1.2 Synonyms.

Polymyxin E Sulphate

2. DESCRIPTION

Appearance: Hygroscopic powder.

Colour: White or almost White.

3. COMPOSITION/INFORMATION ON COMPONENTS.

CAS No.: 1264-72-8

EC: 215-034-3

4. PHYSICO-CHEMICAL DATA.

See detailed specifications in analysis bulletin.

Solubility: Soluble in water, practically insoluble in acetone and ethanol (96°).

5. PROPERTIES/USES.

ACTIVE PHARMACEUTICAL INGREDIENT.

Content: minimum 19 000 IU/mg (dry matter).

Colistin is a polypeptide antibiotic, a mixture of polypeptide sulphates produced by certain strains of *Bacillus polymyxa* var. *colistinus* that belongs to the group of polymyxins.

Colistin is a cyclic polypeptide antibacterial agent pertaining to the group of polymyxins that acts by damaging the cell membrane, resulting in physiological effects that are lethal for bacteria. Polymyxins are selective for Gram-negative aerobic bacteria endowed with hydrophobic outer membrane.

Colistin has a potent bactericidal action against a spectrum of gram-negative bacteria, especially enterobacteria, and in particular against *Pseudomonas aeruginosa*.

Colistin has practically no activity against gram-positive bacteria or fungi.

Gram-positive bacteria are naturally resistant to colistin, as are some species of gram-negative bacteria such as *Proteus* and *Serratia*.



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However, acquired resistance to Colistin in gram-negative enteric bacteria is rare and is explained by the modification of Lipid A. These modifications are associated with chromosomal or transferable mutations by the MCR-1 plasmid.

It is not absorbed through mucous membranes or intact skin.

Colistin sulphate has been administered orally for the treatment of gastrointestinal infections, as well as pre-operatively to prepare the intestine for abdominal surgery and along with other drugs to perform selective decontamination of the intestine in patients at high risk of endogenous infection.

6. DOSAGE.

According to prescription depending on the species.

7. REMARKS.

The product has been handled in a NON-sterile room; for batches suitable for sterile use, check availability.

STORAGE:

Store at room temperature ($25\pm 2^{\circ}\text{C}$), in a cool, dry place, away from sunlight, in a tightly closed container.

8. BIBLIOGRAPHY.

"Martindale. The Extra Pharmacopoeia". 37th Edition. Ed. The Pharmaceutical Press. London. (2011).