



# Neomycin C Sulfate, EvoPure<sup>®</sup>

## PRODUCT DATA SHEET

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**Product Name:** Neomycin C Sulfate, EvoPure<sup>®</sup>

**Product Number:** N022

**CAS Number:** 66-86-4

**Molecular Formula:**  $C_{23}H_{46}N_6O_{13} \cdot xH_2SO_4$  (lot specific)

**Molecular Weight:** 614.64 (Free base)

**Form:** Powder

**Appearance:** White Powder

**Source:** *Streptomyces Fradiae*

**pH:** 5.7-7.5

**Storage Conditions:** -20°C

**Description:** Neomycin C Sulfate, EvoPure<sup>®</sup> is the highly purified sulfate salt of Neomycin C, the stereoisomer to Neomycin B. Despite its similarity to Neomycin B, Neomycin C is thought to have ~ 35% of its biological activity. Highly pure Neomycin compounds can be used in cell culture, upstream biopharma, and cancer research.

For more Neomycin products, [click here](#).

**Custom manufacturing and testing:** We are able to prepare custom Neomycin components for your unique specifications. Additionally, we offer additional testing including endotoxin content, arsenic content, cell line testing, spectral analysis, and more. For more information, please [contact us](#).

**Mechanism of Action:** Aminoglycosides target the 30S ribosomal subunit resulting in an inability to read mRNA ultimately producing a faulty or nonexistent protein.

**Spectrum:** Neomycin is a broad-spectrum antibiotic, however, it is mostly used against Gram-negative bacteria.

**Microbiology Applications** Neomycin can be used for gene selection, via exploiting the resistance gene (NPT II) (Aragão, 2009).

Neomycin is commonly used in clinical *in vitro* microbiological antimicrobial susceptibility tests (panels, discs, and MIC strips) against Gram-positive and Gram-negative microbial isolates. Medical microbiologists use AST results to recommend antibiotic treatment options. Representative effective ranges include:

- *Pseudomonas aeruginosa* 0.5 µg/mL – 64 µg/mL
- *Haemophilus influenzae* 1.6 µg/mL – 6.3 µg/mL

For a representative list of Neomycin MIC values, [click here](#).

Neomycin Sulfate can be used for food testing in TSN agar to select for *Clostridium perfringens* and inhibit growth of *Enterobacteria* and *Clostridium bifermentans*.

**Plant Biology Applications**

Neomycin is commonly used in negative selections for plants which have been successfully been transformed with a plasmid conferring resistance via *Agrobacterium* mediated transformation.

**Technical Data:**

HPLC, NMR, FTIR, and MS analysis may be available. For more info, please email [info@toku-e.com](mailto:info@toku-e.com).

**References:**

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