

## 60615 Kanamycin sulfate

### Product Description:

Molecular Formula:  $C_{18}H_{36-37}N_{4-5}O_{10-11} \cdot H_2SO_4$

Molecular Weight: 582.6 g/mol

CAS Number: 70560-51-9

Mixture of Kanamycin A (main component) and Kanamycin B and C.

Cross-resistance occurs between kanamycin and neomycin, framycetin, and paromomycin, and partial cross-resistance has been reported between kanamycin and streptomycin.<sup>1</sup>

This product can be put into agar (agar plate), and the plate should be then be sealed to prevent any evaporation of moisture from the agar. The sealed plate can be stored at 2-8 °C for about one month. If the plate is not sealed to prevent evaporation of moisture, the kanamycin can degrade.

### Preparation Instructions:

Kanamycin sulfate is soluble 1 in 8 part of water, but practically insoluble in alcohol, acetone, chloroform, ether, and ethyl acetate.

A 1% solution in water has a pH of 6.5 to 8.5. This is in contrast to the pH of 5.5 to 7.5 for a 1% solution in water of kanamycin acid sulfate.<sup>1</sup>

This product is soluble at 50 mg/ml in water yielding a clear, colorless to faint yellow solution.

### Storage/Stability:

Solutions of kanamycin monosulfate may be autoclaved. Tissue culture grade kanamycin sulfate solutions are filtered through a 0.2 µm filter, and it is recommended to store these solutions at 2-8 °C for long-term storage.

### References

1. Martindale the Extra Pharmacopoeia, 31st ed., p.244-1.

### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

The vibrant M and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates.

Detailed information on trademarks is available via publicly accessible resources.

© 2018 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

