



## Product Information Sheet

# P6719 Polymyxin B Sulfate Solution 10 mg/mL

Synonyms: Polymixin, Polymixin B  
CAS: 1405-20-5  
Formula:  $C_{55}H_{96}N_{16}O_{13} \cdot 2H_2SO_4$   
Mol. Weight: 1385.61

### Properties

Form: Liquid  
Appearance: Clear, Colorless  
Solubility: Miscible with Water  
Application: Phytopathology, Seed Testing, Microbiology  
Storage Temp: 2-6°C  
Typical Working Concentration: Varies with application, should be determined by end user.

### Application Notes

Active against gram negative bacteria. Acts against microorganisms by binding to and interfering with the permeability of the cytoplasmic membrane.  
Can be used with PhytoSelect Basal Medium (Prod # P6800) and additional antibiotics to select for *Acidovorax avenae* and *Ralstonia solanacearum* (Kawanishi 2011).

### References

- Morrison DC, Jacobs DM (1976) Binding of polymyxin B to the lipid A portion of bacterial lipopolysaccharides. *Immunochemistry*.13(10):813-8.
- Kawanishi T, T. Shiraishi, Y. Okano, K. Sugawara, M. Hashimoto, K Maejima, K Komatsu, S Kakizawa, Y Yamaji, H Hamamoto, K Oshima, S Namba (2011) New Detection Systems of Bacteria Using Highly Selective Media Designed by SMART: Selective Medium-Design Algorithm Restricted by Two Constraints. PLoS ONE Volume 6, Issue 1.