


Specification



Kanamycin sulfate *BioChemica*

A1493

Synonym	Kanamycin
Formula	$C_{18}H_{36}N_4O_{11} \cdot H_2SO_4$
M	582.58 g/mol
CAS-No.:	25389-94-0
HS-No.:	29419000
Storage:	RT
LGK:	10 - 13
R:	61
S:	53-36/37/39-45
	toxic
Specification	
Assay	min. 750 I.U./mg
α20°C/D; 1 %, H₂O	+112° - +123°
pH (1 %; H₂O)	6.5 - 8.5
Loss on drying (60°C)	max. 1.5 % (1 Torr)
Kanamycin B	max. 4 %
Literature	
(1) Mays, D.L. <i>et al.</i> (1976) <i>J. Chromatography</i> 120 , 93-102 High-performance liquid chromatographic determination of Kanamycin.	
Comment	
Kanamycin sulfate is readily water-soluble and very stable as a dry powder. The solution is stable in the pH range from 6 - 8 as well and can be stored for 6 to 8 months at room temperature (loss of activity approx. 1 - 2 %). Autoclaving at 120°C (even for 1 hour) results in a loss of activity of 5 %. In contact with air, kanamycin changes its color without loss of activity. This change in color can be prevented by antioxidants. Kanamycin is active against gram positive and negative cocci and bacteria. Kanamycin sulfate contains approx. 98 % kanamycin A.	