



The stability of colistin methanesulfonate (CMS) was determined in quadruplicate in elastomeric home infusion pumps containing 1, 2 or 3 MU CMS and in infusion bags with 2 MU CMS all in 100 mL normal saline” Post et al (2018).

Abstract:

The stability of colistin methanesulfonate (CMS) was determined in quadruplicate in elastomeric home infusion pumps containing 1, 2 or 3 MU CMS and in infusion bags with 2 MU CMS all in 100 mL normal saline. Infusions were stored at room temperature (20°C-24°C) with or without exposure to natural light or refrigerated (4°C-8°C) and protected from light up to 2 weeks. In the initial solution of 2 MU CMS in 100 mL saline sampled immediately after reconstitution and dilution, 1.5% of CMS was hydrolysed to colistin. When stored at room temperature and exposed to natural light, colistin concentration in elastomeric infusion pumps increased to 2.6% in 8 days and to 2.1% when stored at 4°C. CMS stability increases at lower temperatures and higher concentrations. Based on the current data, chemical stability of CMS infusion solution is sufficient for a shelf life of 7 days refrigerated plus 1 day at room temperature.

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Reference:

Post, T.E., Kamerling, I.M.C., van Rossen, R.C.J.M., Burggraaf, J., Stevens, J., Dijkmans, A.C., Heijerman, H.G.M., Touw, D.J., van Velzen, A.J. and Wilms, E.B. (2018) Colistin methanesulfonate infusion solutions are stable over time and suitable for home administration. *European Journal of Hospital Pharmacy. Science and practice.* 25(6), p.337-339. doi: 10.1136/ejhpharm-2016-001128.

