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Atmospheric Chemistry and Physics Discussions

Interactive comment on "Extinction efficiencies of coated absorbing aerosols measured by cavity ring down aerosol spectrometry" *by* A. A. Riziq et al.

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Evaporation of glutaric acid might have caused the observed lower extinction efficiencies. This acid, due to high vapor pressure at room temperature, will evaporate from particles as they travel inside the CRD cell. Have you tried sizing the coated particles AFTER, not BEFORE the cell? I don't know the vapor pressure of DEHS, but I suspect it can evaporate, too. This can be tested in a very simple way by sizing the coated aerosol that was sent through flow tubes of different volume, giving you the dependence of coating losses vs residence time.

Interactive comment on Atmos. Chem. Phys. Discuss., 7, 18113, 2007.