# Henry's constants and mass transfer coefficients of halogenated organic pollutants in an air stripping packed column.

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摘要.

**Abstract**

Both Henry's constants and volumetric mass transfer coefficients (KLa) of eight priority chlorinated organic compounds including 1,1-dichloroethene, methylene chloride, chloroform, carbon tetrachloride, 1,1,1-trichloroethane, trichloroethylene, tetrachloroethylene, and 1,4-dichlorobenzene in an air stripping packed column were investigated in this study. The liquid and gas phase EPICS (Equilibrium Partition in Closed System) and direct calculating methods were applied to determine the Henry's constants of VOCs. The interference of co-solute on Henry's constants was also investigated. Experimental results indicated that decrease in Henry's constants of VOCs was observed in the presence of humic acid but no apparent effect on Henry's constants was detected when there was NaCI and surfactant in solution. Four different configurations of packing media including Intalox Saddle, Super Intalox Saddle, Telleret, and Hedgehog made of polypropylene were respectively packed in the air stripping tower and investigated in the study. The dependence of hydraulic loading, air-water ratio, and configurations of packing media on mass transfer coefficients of VOCs was discussed.