



Volatile amines are an occupational health hazard. There are several methods for workplace monitoring published by the U.S. Occupational Health and Safety Administration (OSHA). Typical methods use some kind of trapping reagent in an air-sampling tube. In this case, 1-naphthyl isothiocyanate (NITC) reacts with amines in the trap, to produce a UV-absorbing thiourea derivative. OSHA methods describe the use of normal-phase LC, but reversed-phase LC can provide equivalent or better results. As shown here, the Acclaim C30 can analyze the three amines in Method 60 with a simple isocratic reversed-phase elution. Compared to the existing OSHA method, the new chromatographic step provides improved peak shape and better detection limits.