

9.2.4.4 Minimum Detectability

The concentration or mass flow of a sample component in the mobile phase that gives a detector signal equal to twice the noise level. It can be calculated from the measured sensitivity (S) and noise (N):

$$D = 2N/S$$

where D is the minimum detectability, expressed either as concentration or mass-flow of the substance of interest in the mobile phase at the detector. Both sensitivity and minimum detectability must be determined for the same substance.