resolution

*in gas chromatography*

A characteristic of the separation of two adjacent peaks. It may be expressed according to the equation:

\[ R_{AB} = 2 \frac{|d_R(B) - d_R(A)|}{w(B) + w(A)} \]

where \( R_{AB} \) is the resolution, \( d_R(A) \) and \( d_R(B) \) are the retention distances (time or volume) of each eluted component A and B, and \( w(A) \) and \( w(B) \) are the respective widths of each peak at its base.

**Source:**
PAC, 1990, 62, 2167 (*Glossary of atmospheric chemistry terms (Recommendations 1990)*) on page 2211