

relative retardation (in planar chromatography), R_{rel}

A term which is equivalent to relative retention used in column chromatography: the ratio of the R_{F} value of a component to the R_{F} value of a standard (reference) substance. Since the mobile phase front is common for the two components, the R_{F} value can be expressed directly as the ratio of the distances travelled by the spot of the compound of interest (b_i) and the reference substance (b_{st}) respectively:

$$R_{\text{rel}} = R_{\text{F}(i)}/R_{\text{F}(\text{st})} = b_i/b_{\text{st}}$$

In former nomenclatures the symbol R_{s} was used to express relative retardation in planar chromatography. Because of its identity with the symbol for peak resolution the symbol R_{rel} is suggested for relative retardation in planar chromatography.

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