

**I U P A C Gold Book**  Resources

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**retardation factor,  $R_F$**

*in planar chromatography*

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Ratio of the distance travelled by the centre of the spot to the distance simultaneously travelled by the mobile phase:

$$R_F = \frac{b}{a}$$

By definition the  $R_F$  values are always less than unity. They are usually given to two decimal places. In order to simplify this presentation the  $hR_F$  values may be used: they correspond to the  $R_F$  values multiplied by 100. Ideally,  $R_F$  values are identical to the  $R$  values used in column chromatography.

**Source:**  
PAC, 1993, 65, 819. (*Nomenclature for chromatography (IUPAC Recommendations 1993)*) on page 845 [Terms] [Paper]

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