



## How to determine concentration of an impurity in HPLC with the relative response factor RRF – How to

**The concentration can be calculated once you have values for the following two equations:**

$$\text{Response Factor (RF)} = \text{Peak Area} / \text{Concentration}$$

$$\text{Relative Response Factor (RRF)} = \text{RF}_{\text{impurity}} / \text{RF}_{\text{API}}$$

You can use RRF and  $\text{RF}_{\text{API}}$  to solve for  $\text{RF}_{\text{impurity}}$ . Then you can use the measured peak area of the impurity to solve for its concentration.



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