

## 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.



Printed from the Chrom Resource Center

**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)

Date: 05-21-2024