

$$\text{Percent Purity (\%)} = 100 \times \frac{mg_{std} \times MW_{cpd} \times \text{molar ratio}}{mg_{cpd} \times MW_{std}}$$

$mg_{std}$  = mass of internal standard in mg

$MW_{cpd}$  = molecular weight of target compound

$$\text{molar ratio} = \frac{I_{cpd}/nH_{cpd}}{I_{std}/nH_{std}}$$

$I_{cpd}$  = proton integral area of a known peak on the compound being analyzed

$nH_{cpd}$  = number of hydrogens associated with the compound NMR peak

$I_{std}$  = proton integral area of a known peak on the standard

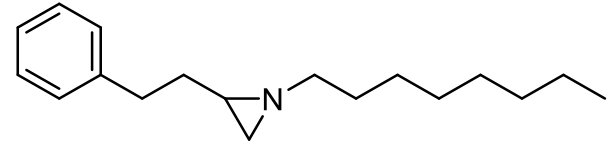
$nH_{std}$  = number of hydrogens associated with the standard NMR peak

$mg_{cpd}$  = mass of target compound in mg

$MW_{std}$  = molecular weight of internal standard compound

$$\text{Percent Purity (\%)} = 98.6\%$$

$$= 100 \times \frac{35.86 \times 259.44 \times \left(\frac{3/3}{4.86/3}\right)}{34.53 \times 168.19}$$



(3)

