

# qNMR spectrum of pure product after vacuum distillation

The purity quantification of crude product by qNMR- using 14.6 mg of dimethylfumarate and 26.0 mg of product

$$\text{Molar ratio} = \frac{\left[ \frac{I_{cpd}}{nH_{cpd}} \right]}{\left[ \frac{I_{std}}{nH_{std}} \right]} = \frac{\frac{6.07}{3}}{\frac{2.00}{2}} = 2.023$$

$$\text{wt\%} = \frac{mg_{std} \times MW_{cpd} \times \text{molar ratio} \times P_{std}}{mg_{cpd} \times MW_{std}} = \frac{14.6 \times 126 \times 2.023 \times 99.9\%}{26.0 \times 144} = 99.3\%$$

