Integrated area of sample (Ix) = 2.01

Integrated area of standard ($Ical$) = 2.00

Number of sample nuclei (Nx) = 3

Number of standard nuclei ($Ncal$) = 3

Molecular weight of sample (Mx) = 182.22

Molecular weight of standard ($Mcal$) = 168.19

Mass of internal standard ($Wcal$) = 25.4 mg

Mass of sample (Wx) = 27.9 mg

Purity of standard ($Pcal$) = 99.5 %

$$Px = \frac{2.01}{2.00} \times \frac{3}{3} \times \frac{182.22}{168.19} \times \frac{25.4}{27.9} \times 99.5 = 98.6\%$$