

Int= average of normalized integrals values

MW =molecular weight

P =Purity (as percent value)

m = mass

n= number of protons giving rise to a given NMR signal (The total number of protons is set to one because an average of all normalized integrals is carried out)

$$n_{\text{DMF}} = 1$$

$$n_2 = 1$$

$$\text{Int}_{\text{DMF}} = 0.5713$$

$$\text{Int}_2 = 1.016$$

$$\text{MW}_{\text{DMF}} = 144.13$$

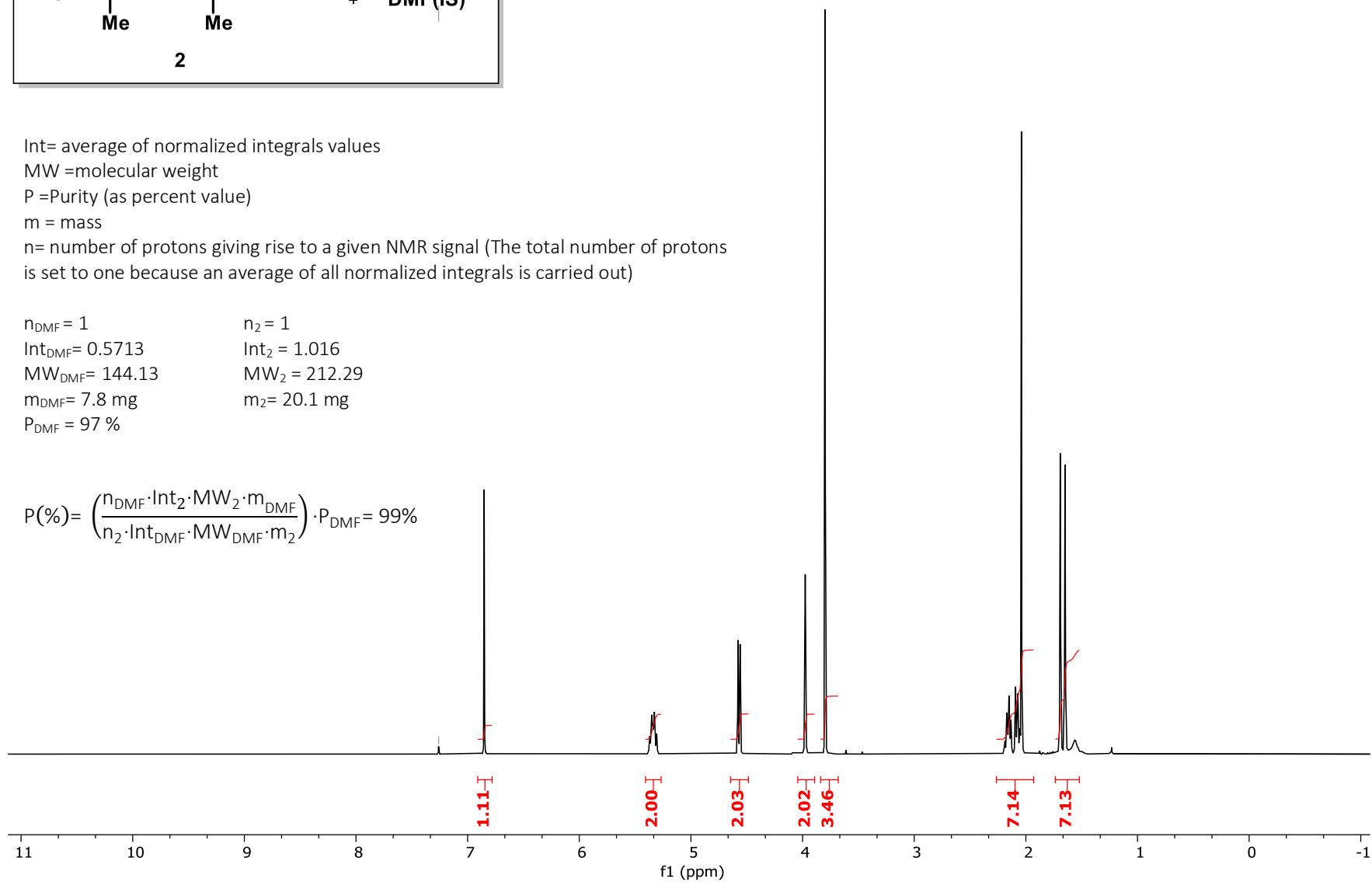
$$\text{MW}_2 = 212.29$$

$$m_{\text{DMF}} = 7.8 \text{ mg}$$

$$m_2 = 20.1 \text{ mg}$$

$$P_{\text{DMF}} = 97 \%$$

$$P(\%) = \left(\frac{n_{\text{DMF}} \cdot \text{Int}_2 \cdot \text{MW}_2 \cdot m_{\text{DMF}}}{n_2 \cdot \text{Int}_{\text{DMF}} \cdot \text{MW}_{\text{DMF}} \cdot m_2} \right) \cdot P_{\text{DMF}} = 99\%$$



¹H NMR (400 MHz, CDCl₃) of 8-hydroxygeranyl acetate (2) and dimethyl fumarate (DMF) as internal standard.