$$\begin{cases} C_{MIN} = C_{MAX} e^{-k_{01} t} \\ C_{SS} = \dfrac{D}{V_1 \cdot k_{01} \cdot \Delta T} \end{cases} \qquad \begin{cases} 45 = 55 e^{-k_{01} \Delta T} \\ 50 = \dfrac{D}{5 \cdot k_{01} \cdot \Delta T} \end{cases}$$

$$\rightarrow \ln\left(\frac{45}{55}\right) = -k_{01} \Delta T$$

$$\ln\left(\frac{55}{45}\right) = k_{01} \Delta T$$

$$\Delta T = \frac{\ln\left(\frac{55}{45}\right)}{k_{01}} = 0{,}16723 \ [h]$$

$$D = 250 \cdot 1{,}2 \cdot 0{,}16723 = 50{,}169 \ [mg]$$