Ionisation chamber saturation:

Lit: M. Stockner thesis

"http://cern.ch/blm/Talks_and_papers/stockner/thesis_mstockner_cern_11_2007.pdf"

Charge to dose conversion factor:

$$Q\_D := 53\,\frac{\mu C}{Gy}$$

Onset of saturation (charge):

$$Q_{saturation} := 0.16\mu C$$

Onset of saturation (dose):

$$D_{saturation} := \frac{Q_{saturation}}{Q\_D} = 3.019 \times 10^{-3}\cdot Gy$$