

Comparison of the two generic calculators of predicted environmental concentrations (PEC) in soil.

Model	Input (basic)	Scenarios	Remarks
UK PEC Soil calculator (Excel format)	Application rate Application frequency Application interval Crop interception (%) DT ₅₀	5 cm soil depth, but soil depth can be changed manually PEC _{initial} PEC _{plateau} (steady state) PEC _{accumulation} (peak)	Single first order (SFO) kinetics.
Dutch Ctgb PEC soil calculator (Open Document format)	Application rate Application frequency Application interval Crop interception (%) DT ₅₀ Molecular weight	5 or 10 cm soil depth (PIEC = PEC _{initial}) 20 cm soil depth (PEC _{plateau}) 5 cm soil depth (PEC _{plateau} for perennial plants) PEC _{sphere} seeds PEC _{sphere} potatoes PEC _{accumulation}	Single first order (SFO) kinetics. Other degradation kinetics possible, eg. FOMC, DFOP, hockey stick* Calculation of metabolites included in spreadsheet. Micro CFU/ha for concentrations of micro-organisms. Published crop interception values available in the spreadsheet.

PEC_{initial} = concentration immediately after application

PEC_{plateau} = plateau concentration; only for persistent pesticides.

PEC_{accumulation} = PEC initial plus PEC_{plateau}, only for persistent pesticides

PEC_{sphere} = soil concentration due to seed/potato treatment

* Note: the drop down menu is disabled and the kinetics model has to be typed in manually to run other degradation kinetics