R documentation

of 'armitage_estimate_sarea.Rd'

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armitage_estimate_sarea

Estimate well surface area

Description

Estimate geometry surface area of plastic in well plate based on well plate format suggested values from Corning. option.plastic == T (default) give nonzero surface area (sarea, m^2) option.bottom == T (default) includes surface area of the bottom of the well in determining sarea. Optionally include user values for working volume (v_working, m^3) and surface area.

Usage

```
armitage_estimate_sarea(
  tcdata = NA,
  this.well_number = 384,
  this.cell_yield = NA,
  this.v_working = NA
)
```

Arguments

tcdata

A data table with well_number corresponding to plate format, optionally include v_working, sarea, option.bottom, and option.plastic

this.well_number

For single value, plate format default is 384, used if is.na(tcdata)==T

this.cell_yield

For single value, optionally supply cell_yield, otherwise estimated based on well number

this.v_working For single value, optionally supply working volume, otherwise estimated based on well number (m^3)

Value

tcdata, A data table with well_number, sarea (surface area, m^2), cell_yield (# cells), v_working (m^3), v_total (m^3) per well

Author(s)

Greg Honda

References

Armitage, J. M., Arnot, J. A., Wania, F., & Mackay, D. (2013). Development and evaluation of a mechanistic bioconcentration model for ionogenic organic chemicals in fish. Environmental toxicology and chemistry, 32(1), 115-128.

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