Package 'con2lki'

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Type Package

Title Calculate the Dutch Air Quality Index (LKI)

Version 0.1.0

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Description Calculates the dutch air quality index (LKI). This index was created on the basis of scientific studies of the health effects of air pollution. From these studies it can be deduced at what concentrations a certain percentage of the population can be affected. For more information see: <https://www.rivm.nl/bibliotheek/rapporten/2014-0050.pdf>.

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Suggests testthat, dplyr

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con2lki *Calculate lki from contaminants*

Description

LKI is the air quality index used by the Netherlands. The index summarises data on air quality. Each substance concentration is converted into a number from 1 (little pollution) to 11 (a lot of pollution). The substance with the hight index value determines to whole air quality index. If all substances have the same index value, the total index value will be one point higher.

Usage

```
con2lki(no2, pm25, pm10, o3)
```

Arguments

no2	A vector of no2 values
pm25	A vector of pm25 values
pm10	A vector of pm10 values
o3	A vector of o3 values

Details

This index was created on the basis of scientific studies of the health effects of air pollution. From these studies it can be deduced at what concentrations a certain percentage of the population can be affected. For more information see: https://www.rivm.nl/bibliotheek/rapporten/2014-0050.pdf

Value

A vector of lki values

Examples

```
library(dplyr)

df <- data.frame(
    no2  = c(15, 30, 100,  1, 201),
    o3   = c(35, 20,  58,  0, 201),
    pm10 = c(4,  30, 101,  0, 101),
    pm25 = c(45, 40,  99,  2, 110)
)

df %>% mutate(
    lki = con2lki(no2, pm25, pm10, o3)
)
```

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