

# Package ‘con2lki’

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**Type** Package

**Title** Calculate the Dutch Air Quality Index (LKI)

**Version** 0.1.0

**Author** Mark Baas

**Maintainer** Mark Baas <mark.baas@gmail.com>

**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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**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.1.1

**Suggests** testthat, dplyr

**NeedsCompilation** no

**Repository** CRAN

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`con2lki`*Calculate lki from contaminants*

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### 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 high 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

<code>no2</code>	A vector of no2 values
<code>pm25</code>	A vector of pm25 values
<code>pm10</code>	A vector of pm10 values
<code>o3</code>	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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