

# Proyecto de aditivos en R

Esteban Sabroso

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## Carga de datos de aditivos

Aqui cargamos las tablas que vamos a utilizar para tratar los datos

```
library(tidyverse)

rbiodeg <- read_delim(file = "CAS_RBiodeg-txt_OPERA2.9Pred.csv", delim = ",")
#decimos que los decimales son comas

aditivos <- read_delim(file = "aditivosr.txt",
                      delim = "\t", #delimitado por tabulaciones
                      locale = locale(decimal_mark = ",")
                      #decimos que los decimales son comas
                      )
```

Tenemos un problema! Toxicity nos marca que es un caracter

```
summary(aditivos) #toxicity se marca como character siendo un numero
```

Type of Polymer	Utilisation (2-1-0.5-0.25-0) / Recuento	Plastchem ID
Length:119	Min. : 0.250	Min. : 11
Class :character	1st Qu.: 0.250	1st Qu.: 1316
Mode :character	Median : 1.000	Median : 4828
	Mean : 2.204	Mean : 6659
	3rd Qu.: 2.000	3rd Qu.: 11030
	Max. : 13.000	Max. : 16056
CAS Number	Additives	Molecular formula
Length:119	Length:119	Length:119
Class :character	Class :character	Class :character

Mode :character Mode :character Mode :character

Molecular weight (g/mol) Toxicity score (<0,5)  
Min. : 72.11 Length:119  
1st Qu.:138.25 Class :character  
Median :206.32 Mode :character  
Mean :243.67  
3rd Qu.:299.15  
Max. :536.90

Quitamos las comas a puntos

```
unique(aditivos$`Toxicity score (<0,5)`)
```

```
[1] "0,5" "1" "2" "0.5"
```

```
head(aditivos$`Toxicity score (<0,5)`, 10)
```

```
[1] "0,5" "0,5" "0,5" "0,5" "0,5" "1" "0,5" "0,5" "1" "1"
```

```
aditivos$`Toxicity score (<0,5)` <- gsub(",", ".", aditivos$`Toxicity score (<0,5)`)
```

```
aditivos$`Toxicity score (<0,5)` <- as.numeric( aditivos$`Toxicity score (<0,5)`)  
#cambiamos a numerico
```

```
summary(aditivos) #Vemos se ha salido bien
```

Type of Polymer	Utilisation (2-1-0.5-0.25-0) / Recuento	Plastchem ID
Length:119	Min. : 0.250	Min. : 11
Class :character	1st Qu.: 0.250	1st Qu.: 1316
Mode :character	Median : 1.000	Median : 4828
	Mean : 2.204	Mean : 6659
	3rd Qu.: 2.000	3rd Qu.:11030
	Max. :13.000	Max. :16056
CAS Number	Additives	Molecular formula
Length:119	Length:119	Length:119
Class :character	Class :character	Class :character

Mode :character Mode :character Mode :character

Molecular weight (g/mol)	Toxicity score (<0,5)
Min. : 72.11	Min. :0.500
1st Qu.:138.25	1st Qu.:0.500
Median :206.32	Median :2.000
Mean :243.67	Mean :1.387
3rd Qu.:299.15	3rd Qu.:2.000
Max. :536.90	Max. :2.000

### Unimos las tablas

Unimos las dos tablas, tienen las mismas filas en orden con los resultados es decir, son dos tablas complementarias.