Plastic R Documentation

Plastic Film Data

Description

An experiment was conducted to determine the optimum conditions for extruding plastic film. Three responses were measured in relation to two factors, rate of extrusion and amount of an additive.

Usage

```
data(Plastic)
```

Format

A data frame with 20 observations on the following 5 variables.

`tear`

a numeric vector: tear resistance

`gloss`

a numeric vector: film gloss

`opacity`

a numeric vector: film opacity

`rate`

a factor representing change in the rate of extrusion with levels `Low` (-10%), `High` (10%)

`additive`

a factor with levels `Low` (1.0%), `High` (1.5%)

Source

Johnson, R.A. & Wichern, D.W. (1992). *Applied Multivariate Statistical Analysis*, 3rd ed., Prentice-Hall. Example 6.12 (p. 266).

References

Krzanowski, W. J. (1988). *Principles of Multivariate Analysis. A User's Perspective*. Oxford. (p. 381)

Examples

```
str(Plastic)
plastic.mod <- lm(cbind(tear, gloss, opacity) ~ rate*additive, data=Plastic)
Anova(plastic.mod)

pairs(plastic.mod)
```