

Portuguese "Vinho Verde" Wine Dataset Codebook

The predictors of the dataset describe the amount of various chemicals present in wine and the output variable is quality.

1 - **fixed acidity** (numeric): the amount of acid in wine that is not volatile/does not evaporate easily

2 - **volatile acidity** (numeric): the amount of acetic acid in wine

3 - **citric acid** (numeric): Citric acid is a weak organic acid, which is often used as a natural preservative or additive to food or drink to add a sour taste to food.

4 - **residual sugar** (numeric): comes from natural grape sugars leftover in a wine after the alcoholic fermentation finishes. It's measured in grams per liter.

5 - **chlorides** (numeric): , the concentration of chloride ions (i.e. salt)

6 - **free sulfur dioxide** (integer): used as a preservative because of its anti-oxidative and anti-microbial properties in wine

7 - **total sulfur dioxide** (integer): the portion of SO₂ that is free in the wine plus the portion that is bound to other chemicals in the wine

8 - **density** (numeric): the mass unit per volume in wine

9 - **pH** (numeric): a measure of acidity in wine

10 - **sulphates** (numeric): the amount of food preservative widely used in winemaking, thanks to their ability to maintain the flavor and freshness of wine

11 - **alcohol** (numeric): the percentage of alcohol content in the wine

12 - **quality** (factor): a score between 0 and 10