A dithiane is a compound whose molecule has a six-membered ring containing two sulfur atoms. Dithianes are classified into three classes.

1. **1,2-dithianes**

Dithiane 1 and its derivates are called 1,2-dithianes.

![Diagram of 1,2-dithiane](image)

2. **1,3-dithianes**

Dithiane 2 and its derivates are called 1,3-dithianes.

![Diagram of 1,3-dithiane](image)

3. **1,4-dithianes**

Dithiane 3 and its derivatives are called 1,4-dithianes.

![Diagram of 1,4-dithiane](image)
The three classes of dithianes are different from one another functionally. A 1,2-dithiane is a disulfide. A 1,3-dithiane is either a cyclic thioacetal or a cyclic thioketal (see acyl anion equivalent). The molecule of a 1,4-dithiane contains two thioether groups.

Contributors

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