Stereoisomers are compounds with the same molecular formula and the same structural formula but different from each other in configuration.

eg. 1:

Compounds 1 and 2 have the same molecular formula and the same structural formula but are different from each other in configuration. (In 1, the two bromine atoms are on the same side of the ring; in 2, they are on the opposite sides.) Therefore, compounds 1 and 2 are stereoisomers of each other.

eg. 2:

Compounds 1 and 2 have the same molecular formula and the same structural formula but are different from each other in configuration. (In 1, the two methyl groups are on the same side of the double bond; in 2, they are on the opposite sides.) Therefore, 1 and 2 are stereoisomers of each other.

eg. 3:
Compounds 1 and 2 have the same molecular formula and the same structural formula but are different from each other in configuration. (In 1 and 2, arrangement of ligands around the asymmetric carbon atom is such that 1 and 2 are not superimposable on each other.) Therefore, compounds 1 and 2 are stereoisomers of each other.

see also constitutional isomers, enantiomers, diastereomers

**Contributors**

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