Disproportionation is a reaction in which two units (atoms, molecules, ions, radicals) of the same species react with each other to give two units (atoms, molecules, ions, radicals) of different species. Disproportionation has the following general equation.

\[ \text{A} + \text{A} \rightarrow \text{B} + \text{C} \]

eg:

\[ \text{CH}_3\text{CH}_2 + \text{CH}_3\text{CH}_2 \rightarrow \text{CH}_3\text{CH}_3 + \text{CH}_2=\text{CH}_2 \]

mechanism:

\[ \text{CH}_3\text{CH}_2 + \text{CH}_2=\text{CH}_2 \rightarrow \text{CH}_3\text{CH}_3 + \text{CH}_2=\text{CH}_2 \]

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