A racemic mixture or racemate (symbol: $dl$ or $\pm$) is a mixture of enantiomers at 1:1 molar ratio.

eg: Lactic acid exists as a pair of enantiomers, $(R)$-lactic acid and $(S)$-lactic acid.

\[
\begin{align*}
&\text{(R)-lactic acid} \\
&\text{(S)-lactic acid}
\end{align*}
\]

A mixture of $(R)$-lactic acid and $(S)$-lactic acid at 1:1 molar ratio is a racemic mixture of lactic acid (symbol: $dl$ – lactic acid or $\pm$ – lactic acid).

see also scalemic mixture

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**Contributors**

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