

IUPAC Nomenclature Quiz

ChatGPT said:



Here is the answer key for the IUPAC nomenclature "Fill in the Blank" questions:

1. The IUPAC name of the compound $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$ is **Propan-1-ol**.
2. CH_4 is known as **Methane** in common nomenclature.
3. The root word for a six-carbon chain in IUPAC nomenclature is **Hex**.
4. The suffix used for aldehydes in IUPAC nomenclature is **-al**.
5. The IUPAC name of $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_2\text{Cl}$ is **1-Chlorobutane**.
6. The functional group $-\text{OH}$ in alcohols has the suffix **-ol** in IUPAC nomenclature.
7. The IUPAC name of $\text{CH}_3(\text{CH}_2)_4\text{COOH}$ is **Hexanoic acid**.
8. The prefix used for a methyl group ($-\text{CH}_3$) attached to the main chain is **Methyl**.
9. The IUPAC name of $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}=\text{CH}_2$ is **Pent-1-ene**.
10. The compound CH_3COOH is known as **Ethanoic acid** in IUPAC nomenclature.
11. The suffix for a ketone group ($-\text{CO}-$) in IUPAC is **-one**.
12. In IUPAC nomenclature, the longest continuous chain of carbon atoms is called the **Parent chain**.
13. The prefix for a two-carbon alkyl group in IUPAC is **Ethyl**.
14. The IUPAC name for $\text{CH}_3\text{CH}_2\text{OCH}_3$ is **Methoxyethane**.
15. A cyclic compound with six carbons and one double bond is named **Cyclohexene**.

This key provides the correct IUPAC names for each of the questions.