

## Aldehydes Quiz PDF

### Aldehydes Quiz PDF

Disclaimer: *The aldehydes quiz pdf was generated with the help of StudyBlaze AI. Please be aware that AI can make mistakes. Please consult your teacher if you're unsure about your solution or think there might have been a mistake. Or reach out directly to the StudyBlaze team at [max@studyblaze.io](mailto:max@studyblaze.io).*

#### Which reactions can aldehydes undergo? (Select all that apply)

- Nucleophilic addition
- Electrophilic substitution
- Aldol condensation
- Esterification

#### What is the boiling point trend for aldehydes compared to alkanes and alcohols?

- Higher than both
- Lower than both
- Higher than alkanes, lower than alcohols
- Lower than alkanes, higher than alcohols

#### Which of the following are common methods to synthesize aldehydes? (Select all that apply)

- Oxidation of primary alcohols
- Reduction of carboxylic acids
- Ozonolysis of alkenes
- Hydrolysis of esters

#### Which of the following is the IUPAC name for formaldehyde?

- Ethanal
- Methanal
- Propanal
- Butanal

**Describe the role of aldehydes in the fragrance industry and provide examples of commonly used aldehydes in perfumes.**

**How can aldehydes be differentiated from ketones using chemical tests? Provide examples.**

**What is the significance of the carbonyl group in the reactivity of aldehydes?**

**Which aldehyde is commonly used as a preservative?**

- Acetaldehyde
- Formaldehyde
- Benzaldehyde
- Propionaldehyde

**What is the main product when an aldehyde is oxidized?**

- Alcohol
- Ketone
- Carboxylic acid
- Ether

**Which aldehyde is used in the production of resins and plastics?**

- Formaldehyde
- Acetaldehyde
- Benzaldehyde
- Propionaldehyde

**Which of the following are common uses of aldehydes? (Select all that apply)**

- As preservatives
- In the production of dyes
- As a primary fuel source
- In the manufacture of perfumes

**Which test is commonly used to distinguish aldehydes from ketones?**

- Benedict's test
- Tollens' test
- Iodine test
- Bromine water test

**What is the general formula for an aldehyde?**

- R-COOH
- R-CHO
- R-OH
- R-CO-R'

**Which of the following aldehydes are naturally occurring? (Select all that apply)**

- Benzaldehyde
- Formaldehyde
- Vanillin
- Acetaldehyde

**Which reagent is used to reduce aldehydes to primary alcohols?**

- Potassium permanganate
- Sodium borohydride
- Sulfuric acid

Bromine

**Discuss the environmental and health concerns associated with formaldehyde exposure.**

**Explain why aldehydes generally have higher boiling points than alkanes but lower than alcohols.**

**Which of the following properties are true for aldehydes? (Select all that apply)**

- They are generally more reactive than ketones.
- They have a carbonyl group.
- They can form hydrogen bonds with water.
- They are always insoluble in water.

**Describe the process of oxidizing a primary alcohol to form an aldehyde, including the reagents used.**

**What safety precautions should be taken when handling aldehydes? (Select all that apply)**

- Use in a well-ventilated area
- Wear personal protective equipment
- Avoid all contact with water
- Store in a cool, dry place