

Matter (Chemistry)

Chapter 9: Matter (Chemistry) · Topic 1

Key Concept

Matter can be classified as pure substances (elements and compounds) or mixtures, based on whether it has a fixed or variable composition.

The properties of matter, both physical (like colour, density) and chemical (like reactivity), help us identify and classify substances.

Changes of state and chemical reactions both involve rearrangement of particles, though chemical reactions form entirely new substances.

Understanding matter at this level helps us predict how substances will behave and interact in different conditions and reactions.

Quick Revision Notes

- Matter is studied at atomic and molecular level in chemistry.
- It's classified as pure substances or mixtures.
- Pure substances have fixed composition.
- Physical properties: colour, density.
- Chemical properties: reactivity.
- Changes of state rearrange particles.
- Chemical reactions form new substances.
- Understanding matter predicts substance behaviour.

Practice Questions

- 1 Classify five substances as pure or mixture.
- 2 List a physical and a chemical property of water.
- 3 Discuss the difference between state change and chemical reaction.
- 4 Research a chemical property of iron.
- 5 Explain why understanding matter helps predict reactions.
- 6 Create a chart classifying matter types.