

Cambridge IGCSE Chemistry

Topic 8: Acids, bases and salts

Types of oxides

Notes



Classify oxides as either acidic or basic, related to metallic and non-metallic character

- Many metals and non-metals react with oxygen in the air when they are heated to produce metal oxides and non-metal oxides
- The nature of these oxides is either acidic or basic
 - E.g. MgO basic (metal oxide)
 - E.g. CO₂ acidic (non-metal oxide)
 - E.g. SO₂ acidic (non-metal oxide)

(Extended only) Further classify other oxides as neutral or amphoteric

- Neutral oxides also exist
 - These are non-metal oxides that neither neutralise acids or base
 - E.g. H₂O water, CO, NO etc...
- Amphoteric oxides exist as well
 - Metal-oxides that neutralise both acid and bases to form a salt and water (amphoteric means having both acidic and basic properties)
 - E.g. Al₂O₃ and ZnO

