	1. NaOH # reduced and oxidized * disproportionation	if heptane is added : upper layer turn purple (iodine in non-aqueous solvent) (NaOH) cold dilute $NaCl + OCl^-$ (sodium hypochlorite) Hot concentrated $NaCl + ClO^{3-}$ (sodium chlorate)

Reducing agent

Sulphite ions (SO2 dissolve in H2O- --- Sulphurous acid H2S03 ---- SO_3^{2-}	$SO_3^{2-} > SO_4^{2-}$	React with : 1. bromine 2. acidified KMnO4 3. acidified K2Cr2O7
Sulphur dioxide	$SO_2 > SO_2^{2-}$	

Redox in chemical cell

Zinc-carbon cell – 1.5V

Cathode (negative) – zinc cup $Zn > Zn^{2+} + 2e^-$

electrolyte – ammonium chloride (NH_4Cl)

ammonium ions

$2NH^{4+} + 2e^- > 2NH_3 + H_2$

Hydrogen gas accumulate on the surface of graphite

- slows down + decrease the current produced

Anode (positive) – graphite

- surrounded by manganese (4)oxide (MnO_2)
- powdered graphite- increase electrical conductivity

$2MnO_2 + H_2 > Mn_2O_3 + H_2O$

reaction at graphite:

overall reaction :