

Oxidant name/formula	Colour	State	Reduction half equation
	Colourless		$O_2(g) + 4e^- \rightarrow 2O^{2-}$
Hydrogen ion,		aq	
Chlorine, $Cl_2$			
Permanganate, $MnO_4^-$	Purple		
Dichromate,		aq	
Hydrogen peroxide,		aq	
	Brown		$I_2(aq) + 2e^- \rightarrow 2I^-$
Iron(III) ion, $Fe^{3+}$		aq	
Bromine,	Orange		
Hypochlorite,	Colourless		$OCl^-(aq) + H_2O + 2e^- \rightarrow Cl^-(aq) + 2OH^-(aq)$
		aq	$Cu^{2+}(aq) + e^- \rightarrow Cu^+(aq)$
Conc. Nitric acid, $HNO_3$		aq	
Iodate,	Colourless		$2IO_3^-(aq) + 12H^+(aq) + 10e^- \rightarrow I_2(aq) + 6H_2O$

Reductant name/formula	Colour	State	Oxidation half equation
	Black	s	$C + 2H_2O \rightarrow CO_2 + 4H^+ + 4e^-$
Carbon monoxide,			$CO + H_2O \rightarrow CO_2 + 2H^+ + 2e^-$
Sulphur dioxide, SO <sub>2</sub>		g	
Sulphite,		aq	
Hydrogen, H <sub>2</sub>			
			$2I^- \rightarrow I_2 + 2e^-$
Bromide,	Colourless	aq	
Iron (II) ions,		aq	
Zinc, Zn		s	
Magnesium,	Grey		
Copper,			$Cu \rightarrow Cu^{2+} + 2e^-$
		s	$Fe \rightarrow Fe^{2+} + 2e^-$
Hydrogen peroxide,		aq	
Hydrogen sulphide,	Colourless		$H_2S(g) \rightarrow S(s) + 2H^+(aq) + 2e^-$