

Table 4.2 – Rules for Assigning Oxidation States

The Oxidation State of...	Summary	Examples
An atom in an element is zero	Element: 0	Na _(s) , O _{2(g)} , O _{3(g)} , Hg _(l)
A monatomic ion is the same as the charge	Monatomic ion: charge of ion	Na ⁺ , Cl ⁻
Fluorine is -1 in its compounds	Fluorine: -1	HF, PF ₃
Oxygen is usually – 2 in its compounds. Exception: peroxides (containing O ₂ ²⁻) in which oxygen is -1	Oxygen: -2	H ₂ O, CO ₂
Hydrogen is +1 in its covalent compounds	Hydrogen: +1	H ₂ O, HCl, NH ₃

Table 4.2 – Rules for Assigning Oxidation States

The Oxidation State of...	Summary	Examples
An atom in an element is zero	Element: 0	Na _(s) , O _{2(g)} , O _{3(g)} , Hg _(l)
A monatomic ion is the same as the charge	Monatomic ion: charge of ion	Na ⁺ , Cl ⁻
Fluorine is -1 in its compounds	Fluorine: -1	HF, PF ₃
Oxygen is usually – 2 in its compounds. Exception: peroxides (containing O ₂ ²⁻) in which oxygen is -1	Oxygen: -2	H ₂ O, CO ₂
Hydrogen is +1 in its covalent compounds	Hydrogen: +1	H ₂ O, HCl, NH ₃