Carbonyl compounds

A-Level Chemistry · Vocabulary in context

Word	Example
carbonyl compound /ˈkɑːbənaɪl ˈkɒmpaʊnd/	Propanone is a **carbonyl compound**.
carbonyl /ˈkɑːbənaɪl/	Aldehydes and ketones both have a **carbonyl** group, C=O. C=O
aldehyde /ˈældɪhaɪd/	Ethanal is an **aldehyde**.
ketone /ˈketəʊn/	Propanone is a **ketone**.
oxidation /ˌɒksɪˈdeɪʃn/	**Oxidation** is the loss of electrons.
alcohol /ˈælkəhɒl/	Ethanol is an **alcohol**.
distillation /dɪstɪˈleɪʃn/	**Distillation** separates ethanol from water.
reflux /ˈriːflʌks/	Heat under **reflux** so that nothing boils away.
reduction /rɪˈdʌkʃn/	**Reduction** is the gain of electrons.
hydrogen cyanide /ˈhaɪdrədʒn ˈsaɪənaɪd/	**Hydrogen cyanide** is a very poisonous gas.
catalyst /ˈkætəlɪst/	A **catalyst** speeds up a reaction without being used up.
hydroxynitrile /haɪˈdrɒksɪnaɪtraɪl/	Adding HCN to ethanal gives a **hydroxynitrile**. HCN
nucleophilic addition /ˌnjuːklɪəˈfɪlɪk əˈdɪʃn/	Hydrogen cyanide reacts with a ketone by **nucleophilic addition**.

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lone pair /ləʊn peə/	Water has two **lone pair**s of electrons on its oxygen atom.
optical isomers	**Optical isomers** turn polarised light in opposite directions.
racemic mixture /rəˈsiːmɪk ˈmɪkstʃə/	A **racemic mixture** has equal amounts of two optical isomers.
condensation /kɒndenˈseɪʃn/	In **condensation**, two molecules join and give off water.
Fehling's reagent /ˈfeɪlɪŋz rɪˈeɪdʒənt/	An aldehyde turns blue **Fehling's reagent** brick red.
Tollens' reagent /ˈtəʊlənz rɪˈeɪdʒənt/	An aldehyde makes a silver mirror with **Tollens' reagent**.
tri-iodomethane /traɪ ˈaɪədəʊmθeɪn/	**Tri-iodomethane** is a yellow solid with an antiseptic smell.