Properties of Substances and Mixtures

AP Chemistry · Vocabulary in context

Word	Example
Intermolecular forces /ˌɪntəməˈlekjʊlə ˈfɔːsɪz/	**Intermolecular forces** act between molecules, not inside them.
London dispersion forces /ˈlʌndn dɪˈspɜːʃn ˈfɔːsɪz/	**London dispersion forces** are stronger in larger molecules.
Dipole–dipole /ˈdaɪpəʊl ˈdaɪpəʊl/	**Dipole–dipole** forces act between polar molecules.
Hydrogen bonding /ˈhaɪdrədʒn ˈbɒndɪŋ/	**Hydrogen bonding** gives water its high boiling point.
Ion–dipole /ˈaɪɒn ˈdaɪpəʊl/	**Ion–dipole** forces help salt dissolve in water.
polarizable	Large atoms are more **polarizable**: their electrons move more easily.
vapor pressure	A liquid with weak forces has a high **vapor pressure**.
malleable /ˈmæləbl/	Metals are **malleable**: you can hammer them into sheets.
ductile /ˈdʌktaɪl/	Copper is **ductile**: it can be drawn into wires.
free valence electrons /fri: ˈveɪləns ɪˈlektrɒnz/	**Free valence electrons** let metals conduct electricity.
crystalline /ˈkrɪstəlaɪn/	Salt is **crystalline**: its particles are in a regular pattern.
amorphous /əˈmɔːfəs/	Glass is **amorphous**: its particles have no regular pattern.

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mole fraction /məʊl ˈfrækʃn/	The **mole fraction** of nitrogen in air is about 0.78.
Kinetic molecular theory /kɪˈnetɪk məˈlekjʊlə ˈθɪəri/	**Kinetic molecular theory** says gas particles move fast and randomly.
solution /səˈluːʃn/	Salt water is a **solution**.
solute /ˈsɒljuːt/	Salt is the **solute** in salt water.
solvent /ˈsɒlvənt/	Water is the **solvent** in salt water.
molarity /məʊˈlærɪti/	**Molarity** is moles of solute per litre of solution.
chromatography /krəʊməˈtɒgrəfi/	**Chromatography** separates the dyes in ink.
Solubility /ˌsɒljuːˈbɪlɪti/	**Solubility** is how much solute dissolves.
Spectroscopy /spekˈtrɒskəpi/	**Spectroscopy** studies how matter absorbs or gives out light.
photons /ˈfəʊtɒnz/	Light is made of tiny packets called **photons**.
Beer–Lambert law /bɪə ˈlæmbət lɔː/	The **Beer–Lambert law** links absorbance to concentration.

$$\frac{0.78}{}$$

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