

adsorption

the adhesion molecules of a fluid to a solid surface; the degree of absorption depends on temperature, pressure and the surface area; the forces binding the fluid may be chemical or physical

bakelite

a synthetic resin made by the chemical reaction of formaldehyde and phenol; it is a thermosetting plastic and a hard, strong material used as an electrical insulator, an adhesive and a paint binder

biodegradable

being able to be broken down in the environment by organisms

cassia

an evergreen tree related to cinnamon

caustic

a substance that burns or destroys flesh

celluloid

the first commercial synthetic plastic developed in 1869; it is tough, strong and resistant to water, oils and dilute acids and thermoplastic; being highly inflammable it has now been replaced by other plastics

closed systems

a chemical system which neither gains nor loses mass; it does not necessarily mean that it is physically closed

coal tar

a dense black viscous liquid produced by the destructive distillation of coal; fractional distillation of coal tar produces a wide variety of industrially important substances

collagen

a tough, fibrous protein that is a major component of connective tissues of many animals; animal hide is chiefly collagen, converted by tanning into leather

contact process

the manufacture of sulfuric acid from sulfur trioxide using a catalyst; it is so named because the gases need to be in contact with the catalyst

deliquescent

becoming liquid by absorbing moisture from the air

desiccant

a desiccating agent; a chemical that removes water

dissociation

when a substance dissolves and ions that exist in the ionic substance are released

emulsion

the dispersion of small droplets of one liquid in another

endothermic

a reaction in which heat is taken during the reaction; the containment vessel cools down

equilibrium

a dynamic chemical state in which reactions proceed in both directions, forward and reverse, their rates being equal; macroscopically the concentrations of reactants and products remain the same

equilibrium constant

a numerical ratio,  $K$ , where  $K = \frac{\text{products}}{\text{reactants}}$  and indicates the relative amounts of reactants and products in an equilibrium reaction

exothermic

a reaction in which heat is given out during the reaction; the containment vessel heat up

flocculent

like tufts of wool

Frasch process

a method for extracting sulfur from underground sulfur deposits