

SOLUBILITY TRENDS

Like Dissolves Like
Cohesive IMFs Similar To Adhesive IMFs

Nonpolar
More Hydrophobic



Polar
More Hydrophilic



INORGANIC

Diatomic Gases (H_2 , O_2 , N_2)

Salts
(with +1 ions; with -1 ions)
(Alkali metals, Ammonium, Halides, Nitrates)

ORGANIC



Longer
Alkyl Carbon Chains
Shorter
Alkyl Carbon Chains



Solvent Example
(polarity relative to water)

Cyclohexane Soluble (0.006)	Acetone Soluble (0.355)	Ethanol Soluble (0.654)	Water Soluble (1.000)
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hydrocarbons

esters

aldehydes

ketones

carboxylic acids

amides

alcohols
amines