

From Classical Green Solvents to Green Ionic Liquids and Deep Eutectic Solvents

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In this overview, I try to give an introduction and my personal view of “green” solvents. Biodegradability is probably the most important criterion, followed by low toxicity and many other criteria such as flammability, vapour pressure etc.

I will show a series of biogenic solvents, but also some petrol-based ones that can be considered as green.

Particular classes of solvents are Ionic Liquids and Deep Eutectic Solvents. Whereas in the past, they were praised as green in general, today’s consideration is much more critical. I will try to critically discuss pros and cons of such systems for applications, in which the greenness of solutions is important.

Finally, I will say some words about spontaneous structuring in solvent mixtures and solutions that can be achieved without environmentally questionable surfactants.