

The Pictet-Spengler reaction, typically performed in benzene, toluene, or methanol to synthesize isoquinoline and indole alkaloids, can be performed with environmentally friendly reagents using supercritical carbon dioxide at the laboratory scale.

Dunetz, J. R.; Ciccolini, R. P.; Froling, M.; Paap, S. M.; Allen, A. J.; Holmes, A. B.; Tester, J. W.; Danheiser, R. L. Pictet-Spengler reactions in multiphasic supercritical carbon dioxide/CO₂-expanded liquid media. In situ generation of carbamates as a strategy for reactions of amines in supercritical carbon dioxide. *Chemical Communications*. **2005**, (35), :4465-4467.

Combisolvent (Aquastar[®]) is a less toxic, environmentally friendly alternative that can replace methanol in Karl Fischer Titrations.

http://www.emdchemicals.com/analytics/literature/Aquastar_CombiSolvent_Alternative.pdf

Consider using less toxic alcohols such as ethanol or isopropanol in the conducting solution or using no methanol at all (which has increased protein transfer efficiency for high molecular weight species).

http://www.p2000.umich.edu/chemical_waste/cw11.htm

Replace methanol with nonflammable alkaline cleaners instead.

<http://www.ycees.njit.edu/njtap/isr35.htm>

