LLE 9.0 Liquid-Liquid/Supercritical Fluid Extraction Program represents an update to our current thinking on the design of spray, sieve-tray, baffle-tray, and packed extraction columns for use in liquid-liquid or supercritical fluid extraction processes. A membrane extraction option is also included.

In Version 8.01, the programming language was modified to utilize Excel 97 or 2000. This design manual and accompanying diskette utilizes many of the fundamentally consistent models developed by the SRP over the past sixteen years. The design equations have been verified under a wider range of physical properties including supercritical fluid conditions. The packing and sieve-tray models have also been tested and verified with results obtained from a 16.8-in. (i.d.) liquid-liquid extractor. Since these models have only been compared with experimental data obtained from pilot-scale units, some precaution must be taken when designing a large commercial-scale column.

In Version 8.01, the programming calculations for each internal have been separated into their specific worksheets. We anticipate the modification will make the calculations easier to follow and allow the user to modify the code if desired.

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