

SFE-PICLab Ex-20 Supercritical fluid extraction development system

- Method development for SFE
- 10 extractors selected through software
- 10 fractions plus waste
- Multiple co-solvents available
- Fully automated sequences with PLC for stability
- 20 ml / min total flow rate
- Pressure and co-solvent gradients
- Temperature control to 65°C



Fraction collection bottles

Based upon the SFC-PICLab Hybrid 20 supercritical fluid chromatography system, the SFE-PICLab Ex20 unit has a flow rate of up to 20 ml / min, ideal for use with 30 ml extractors used in development of automated extraction processes. A software-controlled selection valve with capacity for 10 extractors coupled with 10 fraction collection devices brings a high degree of flexibility to extraction development whether one is collecting multiple fractions from one (or a few) extractor or a single fraction from 10 different samples.

The operating software can be used to run single extractions or a sequence of extraction methods, including simple, automatic set up of sequences from one or several extraction methods.

Gradients of pressure, flow and co-solvent composition can be run as part of a method with programmed collection in one or several fraction vessels.

Typical extraction vessels are 10 x 20 mm (30 ml) although other dimension extractors can be fitted into the capacious oven which controls extraction temperature up to 65°C

The SFC-PICLab Ex-20 uses the same PLC (process logic controller) technology as the larger extraction and preparative chromatography systems available from PIC Solution – as well as most large scale production units – to give unsurpassed stability of control. The PC is used as an operator interface, displaying the progress of the operation and being used to program the extraction methods.



The proprietary operating software is based on the well-proven and intuitive chromatography software used in PIC Solution systems. Extractions are programmed as methods in which all operating parameters, including gradients and collection, are defined. Sequences of methods can be set up, allowing unattended automated development of extraction procedures.

PIC Solution's innovative back pressure regulation is ideally suited to the demands of fast and accurate pressure control for pressure gradients in extraction processes.

A co-solvent selection valve is available as an option which permits the selection of co-solvent from one of six inlets.

Specifications

Flow Rate:	20 ml/min
Max co-solvent % :	50%
Max operating pressure:	400 bar
Maximum back pressure:	350 bar
Temperature range:	20 - 65°C
Number of extractors:	10
Fractions:	10 + waste
Number of co-solvents:	1 or 6
Control system:	PLC

