

Technical Information Sheet

Kuderna-Danish Evaporative Concentrators

Kontes Article Nos 570010, 570025, 570035

The Kuderna-Danish was developed for the concentration of materials dissolved in volatile solvents. It has found wide application in the field of pesticide analysis. Typical solvents are petroleum ether and hexane, although many others can be used.

Preparation involves charging the flask with material from 40% to 60% of the nominal flask capacity. To prevent initial small losses of material, the column should be pre-wet with about 1 mL of solvent before concentration is begun. Boiling chips of some type should be added and the assembly set over a vigorously boiling water bath. The water level should be maintained just below the lower joint and the apparatus mounted so that the lower rounded surface of the flask is bathed in steam. If carried out in a hood, volatiles can simply be allowed to evolve and escape. Heavier fractions reflux until the final concentrate is collected in the lower tube. Both column connections are 24/40. The distilling column for all complete assemblies is 503000-0121.

Note: Polyacetal clamps are recommended for safety. 570010 includes clamps connecting the column to the flask (size 24) and connecting the flask to the tube (size 19). 570035 includes a clamp connecting the flask to the tube (size 24). 570025 uses springs to attach the flask to the tube. A clamp may be used to replace the springs.

Accessory Polyacetal Clamp

An easy-to-use positive clamp made of tough, color-coded plastic. Clamp will not scratch glass and can be autoclaved to 150 °C. At a lower cost than metal clips, this clamp has good chemical resistance.



570010



570025



570035



675300

Article No.	Fits Joint Size	Color
675300-0019	19 (flask to tube)	Blue
675300-0024	24 (column to flask)	Green