coning and quartering

in analytical chemistry

The reduction in size of a granular or powdered sample by forming a conical heap which is spread out into a circular, flat cake. The cake is divided radially into quarters and two opposite quarters are combined. The other two quarters are discarded. The process is repeated as many times as necessary to obtain the quantity desired for some final use (e.g. as the laboratory sample or as the test sample). If the process is performed only once, coning and quartering is no more efficient than taking alternate portions and discarding the others.

Source:

PAC, 1990, 62, 1193 (Nomenclature for sampling in analytical chemistry (Recommendations 1990)) on page 1204