

Rapid Determination of Oil/Fat Utilizing High Temperature Solvent Extraction

Definition

This method determines crude fat by extraction with petroleum ether or other common fat solvents. The compounds extracted are predominantly triacylglycerides along with small amounts of other lipids.

Scope

This method is applicable to extractions of oilseeds, meats, feeds, and foods and is equivalent to the petroleum ether extraction performed by the Butt and Soxhlet extraction apparatus.

ABSTRACT

AOCS Am 5-04 is used for the determination of crude fat in grains, cereals, meats, pet foods, mixed feeds, forages, oilseeds and other processed foods. The process uses the Soxhlet principle in a closed stainless steel extraction vessel allowing solvent temperatures to exceed solvent boiling points. This improves the kinetics and reduces extraction times. Up to 15 samples are encapsulated in XT4 filter bags, dried, and placed in a specially designed siphoning carrier that is secured in the extraction vessel. The instrument will automatically perform all of the necessary procedural steps to complete the extraction and recycle the solvent, ready for reuse. Extracted samples are dried for approximately 30 minutes, reweighed and fat content determined by loss of weight.

Complete operational details are available in the ANKOM user manuals.

AOCS Am 5-04 can be obtained directly from [AOCS](#)