

Soxtec™ 2055 Fat Extraction System



Soxtec™ 2055 Fat Extraction System - the new generation of manual solvent extraction systems for safe determination of soluble material in food, feed, soil, polymers, textiles, paper, pulp, etc.

Features and benefits

- Separate timer functions for each extraction step make programming and procedure conveniently repeatable
- One handle moves all samples simultaneously
- Accessories for batch handling offer operator convenience
- Closed solvent addition limits operator's exposure to solvents
- Official approvals AOAC 991.36 (meat), AOAC 2003.05, 2003.06 (feed), SCAN-CM 49:93 (paper/pulp), EPA method 3541 (PAH in soil)

System description

The Soxtec™ 2055 System represents the new generation of manual Soxhlet extraction systems. It is designed for maximum user convenience through batch handling of six samples at a time, giving a minimum of system handling.

This has been achieved by applying a new patented version of the Soxhlet extraction technique

combined with integral solvent handling. The system consists of an Extraction Unit and a Control Unit. The sample to be analyzed is weighed into thimbles and inserted in the Extraction Unit. The solvent is added in a closed system. The cups are heated by the electrical heating plate. The 4-step extraction procedure consists of boiling, rinsing, recovery and pre-drying.

The system is flexible and suitable for a wide variety of applications in the food, feed, environmental and industrial segments. It is designed to work with all common solvents used for solvent extraction (we do not recommend the use of Diethyl ether due to the explosion risk when handling it). Typical solvent recovery is 80%, only 16 ml solvent is used per sample. Sample preparation prior to GC/HPLC work is also possible using a specially designed seal. The repeatability is equal to traditional technique (1% rel. or better).

System description**Soxtec™ 2055 comprises:**

- 20550001 Soxtec 2055, 230V Complete with
 1 ea Soxtec 2055 Extraction Unit
 1 ea Soxtec 2055 Control Unit
 1 ea Food/Agri routine accessories kit comprising:
 Extraction cups (3 sets of 6), cup holder, thimble support, thimble holder, thimbles (set of 25), thimble adaptors, thimble handler, tongs for extraction cups, thimble stand, cup stand, seals in viton and butyl, solvent addition tube, solvent emptying tube, Manual and Application Notes.
- 20550002 Soxtec 2055, 115V. As above.

Accessories:

- 10007510 Extraction cups (set of 6), aluminium
 10007673 Extraction cups (set of 6), glass
 10007525 Seals for condensers, viton (set of 6)
 10007526 Seals for condensers, butyl (set of 6)
 10007830 Seals for condensers, RESEL (set of 6)
 10013969 Seals for condensers, polyurethane (set of 6)
 1090 Cemotec™ sample mill (food, feed prior to moisture analysis)
 1093 Cyclotec™ sample mill (food, feed general applications)
 2094 Homogenizer, blender type
 1095 Knifetec™ (water cooled for high fat and high fibre)

In addition, we recommend:

- 15220030 Cellulose thimbles, Ø 33mm (set of 25) double thickness
 15220045 Cellulose thimbles, Ø 33mm (set of 25) single thickness

For total fat determination, used in conjunction with Soxtec™ Extraction Systems we recommend:**SoxCap™ 2047 comprises:**

- SoxCap 2047, 230 V, complete system for integrated boiling and filtration of samples and all accessories needed for acid hydrolysis of food and feed samples
- SoxCap 2047, 115 V. As above.

Performance data:

- Thimble size: 33 × 80 mm, 65 ml
 0.5 to 15 g depending on sample
- Solvent volume: 70-90 ml
- Extraction time: typically 40 to 60 min, depending on application
- Capacity per batch: 6 samples
- Capacity per day: 36 samples
- Measuring range: 0.1-100% fat
- Accuracy: According to official approvals
- Repeatability: ± 1% rel. or better (5-100% fat)
- Heating up time: from 20 to 280°C in 7-9 min (230V)



Closed solvent addition limits operator's exposure to solvents.

Installation requirements:

Equipment	Power supply	Power consumption	Dimensions w × d × h	Weight	Water supply	Ventilation
Extraction Unit	-	-	60 × 38 × 58	30 kg	2 l/min.	Fume hood min. airflow 0,5 m/s (inter locked)
Control Unit	230V, 50-60 Hz 115V, 50-60 Hz	1550 W	31 × 24 × 16	3 kg	-	-

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