

Soxtec™ 2043 Fat Extraction System



Solvent extraction system for fast, safe determination of soluble material in food, feed, soil, polymers, textiles, paper, pulp, etc.

Features and benefits

- Only ~10 ml of solvent used per sample with the recovery system
- Separate timer functions for each extraction step make programming and procedure conveniently repeatable
- Accessories for batch handling improve laboratory efficiency
- 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™ 2043 is designed for rapid, safe and economic extraction of solid and semisolid materials. This has been achieved by applying a patented version of the Soxhlet extraction technique. It is designed for maximum user convenience through batch handling of six samples at a time.

The Soxtec 2043 is CE approved according to the LVD and EMC Directives. It consists of an Extraction Unit and a Control Unit. The extraction unit must be installed in a well ventilated fume hood (air flow 0,5 m/s). The sample to be analyzed is weighed into thimbles and inserted in the Extraction Unit. The cups are heated by the electrical heating plate. The 3-step extraction procedure consists of boiling, rinsing and recovery.

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 ~10 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).

<p>System description</p> <p>Soxtec™ 2043 comprises:</p> <ul style="list-style-type: none"> • Soxtec 2043, 230 V <ul style="list-style-type: none"> 1 ea Soxtec 2043 Extraction Unit 1 ea Soxtec 2046 Control Unit 1 ea Food/Agri routine accessories kit comprising: <ul style="list-style-type: none"> Extraction cups (1 set of 6), cup holder, thimbles (set of 25), thimble adaptors, thimble stand, seals in viton and butyl, Manual and Application Note AN 301. • Soxtec 2043, 115 V. As above. <p>In addition, we recommend:</p> <p>Cellulose thimbles, Ø 26mm (set of 25)</p> <p>Cellulose thimbles, Ø 26mm (set of 25) for sample preparation</p> <p>Thimble handler</p> <p>Thimble support</p> <p>Holder for thimble support</p>	<p>Accessories:</p> <p>Cup holder</p> <p>Thimble stand</p> <p>Extraction cups (set of 6), aluminium</p> <p>Extraction cups (set of 6), glass</p> <p>Seals for condensers, viton (set of 6)</p> <p>Seals for condensers, butyl (set of 6)</p> <p>1090 Cemotec™ sample mill (food, feed prior to moisture analysis)</p> <p>1093 Cyclotec™ sample mill (food, feed general applications)</p> <p>2094 Homogenizer™, blender type</p> <p>1095 Knifetec (water cooled for high fat and high fibre)</p>
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Performance data:	
Thimble size:	26 × 60 mm. Approx. 25 ml
Solvent volume:	40 ml
Extraction time:	typically 40 to 60 min, depending on application
Capacity per batch:	6 samples
Capacity per day:	30-36 samples
Measuring range:	0.1-100% fat
Accuracy:	According to official approvals
Repeatability:	± 1% rel. or better at 5-100% fat
Heating up time:	from 20°C to 280°C in 7-9 min (230 V)

Installation requirements:						
Equipment	Power supply	Power consumption	Dimensions w × d × h	Weight	Water supply	Ventilation
Extraction Unit	-	-	57 × 35 × 58	30 kg	2 l/min	Fume hood min. airflow 0,5 m/s (inter locked)
Control Unit	230 V, 50-60 Hz 115 V, 50-60 Hz	1 250 W	28 × 23 × 19	3 kg	-	-

* Ordering information: See separate price-list

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