



Solvent recovery extractor for fats and oils “Det-gras N”

FOR THE DETERMINATION OF FATS BY SOXHLET METHOD.
SAFETY PROTECTION IP65.

Equipment for the extraction of fats and soluble substances that will dissolve in solvents. Based on the Soxhlet methods by Randall, the DET-GRAS-N extracts fats (and or other substances) from the sample by dissolving them in a solvent. If compared to the classic standard soxhlet method, a time saving of between 30-70% can be obtained due to a two stage extraction process and high speed in obtaining high temperatures.

APPLICATIONS

Practically all methods of classic soxhlet extraction can be substituted by the DET-GRAS N. Typical fat determinations are: in meat products, animal fodder, pre-prepared foods, fish etc. Also suitable for the extraction of soluble components in paper paste, textile fibres etc.

FEATURES

Heating by protected electric heater, distributed throughout the radiator surface that provides homogeneous heating throughout the samples.
Electrical safety according to IP65.
Robust temperature control by a durable thermocouple.
Safety over temperature device.
Outer case made of solvents resistant epoxy coated steel.
Extractions can be completed using glass or cellulose thimbles.
Compatible with most common solvents: Petroleum ether, Diethyl ether, hexane, acetone acetonitrile etc.
Supplied complete with 2 sets of seals, adapters for different solvent types.
Typical extraction time (food fats) 50 minutes.
Compatible with the hydrolysis unit HI-1427 part No 4001427 (see page 254).

SPECIFICATIONS

Cellulose extraction thimbles \varnothing_{ext} 26 x 60 mm.
Reusable glass thimbles \varnothing_{ext} 34 x 80 mm.
Working temperature of 90 to 240 °C.
Solvent recovery 60 to 80 %.
Solvent volume (by sample): up to 50 ml.
Program memories: 16.
Extraction time <<boiling>>: from 0 to 99 minutes.
Extraction time <<rinsing>>: from 0 to 99 minutes.
Time to recuperate solvents: from 0 to 99 minutes.



CONTROL PANEL

LCD display of 2 lines of 20 characters.
Keypad with 4 push buttons to select temperature, time and programs.

MODELS

Part No.	No. of places	Height / Width / Depth cm	Water consumption litres/minute	Power W	Weight Kg
4002841	2	70 45 40	1	200	19
4002842	6	70 75 40	2	600	25

Supplied with	model 6 places	model 2 places
Cellulose sample thimbles	25	25
Thimble rack	3	1
Support rack beakers	3	1
Aluminium tubes for thimble support	18	6
Extraction support for thimbles	18	6
Aluminium solvent beakers	18	6
Magnetic tongs for thimble manipulation	1	1
Tongs for manipulation of Aluminium beakers	1	1
Support rack	1	1
Transporting support handles	1	1
Butyl Joints	6	2
Vitron Joints	6	2



Accessories supplied with the 6 place model.



Sample hydrolysis HI-1427

FOR THE HYDROLYSIS OF FAT SAMPLES.



APPLICATIONS

Fat sample preparation equipment for extraction and the determination of fat content. Hydrolysis, filtration and washing of samples without manipulating or transferring. The hydrolysis of samples is required prior to determining the precise fat content of meat and dairy products. Efficient method that speeds up the extraction process.

FUNCTION

Boil the sample with water and HCl 5N ("A"), filter and retain the fat in the extraction thimble and washing the remains of the fat and the acid ("B"). A classic hydrolysis using conventional techniques can produce errors due to transferring and the manipulation of the sample that results in sample loss. During the HCL process some of the acid evaporates, it is therefore necessary to extract the acid vapour.

FEATURES

Metallic construction, exterior coated with a Rilsan polyamide. Capacity for 6 glass tubes. Enclosed, quartz tube, heater system. Manual process and procedure from hydrolysis to filtration and wash without having to manipulate the sample.

CONTROL PANEL

Illuminated ON/OFF mains switch
Heater control from 0 to 100 %.

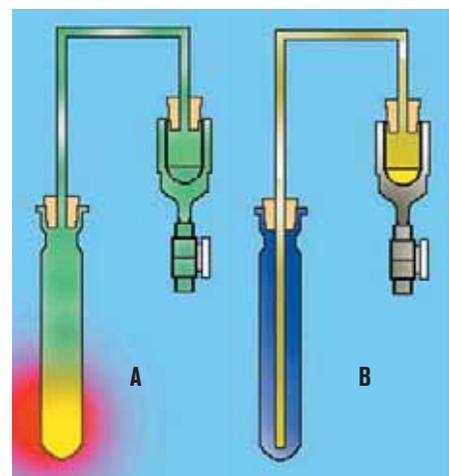
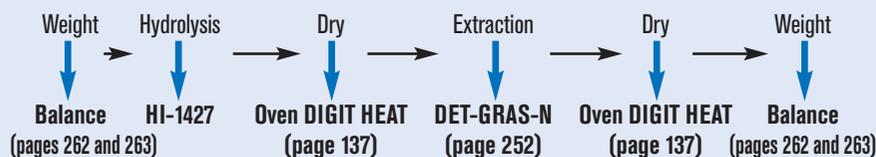


MODEL

Part No.	No. of places	Height / Width / Depth (externo) cm	Power W	Water consumption litres/minute	Weight Kg
4001427	6	85 64 40	1000	2	41

Supplied with 6 tubes, 42 mm diameter x 300 mm long.

EQUIPMENT REQUIRED FOR HYDROLYSIS AND THE % DETERMINATION OF FAT



Sample hydrolysis: In position "A", the suction acts like a vapour extractor.
Filter and wash: In position "B", the suction acts like a filter.