

TXL-ELY-009 / 27 October 2026 · One-year manufacturer warranty

Rapid Oil Extraction Apparatus

Determines the oil or finish content of wool or synthetic samples by solvent percolation and evaporation within 15 minutes. Temperature range is 60–150 °C; sample weight is 2 g per test.



Model technical data

1	Determines the oil or finish content of wool or synthetic samples by solvent percolation and evaporation within 15 minutes.
2	Temperature range is 60-150 °C and sample weight is 2 g per test.

Physical specifications and utilities

Electrical supply	Approx. 220–240 V AC, 50/60 Hz, single phase; build-dependent.
Power / connected load	Approx. 1000–2000 W connected load for preliminary planning.
Overall instrument dimensions	Approx. 700 × 500 × 700 mm (W × D × H).
Instrument weight	Approx. 25–50 kg net.
Gross / shipping weight	Approx. 37.5–72.5 kg gross; estimated packing allowance.
Lab requirements	Suitable fume hood, cooling water / recirculator and waste collection for solvent work; solvent follows the method.

Dimension order and approximate values are stated in each row. Packaging data are separate from instrument dimensions and net mass. Approx. rows are preliminary engineering estimates based on comparable equipment and function/capacity; they are not verified manufacturing measurements or standard requirements. Installation and shipment are finalised against the approved drawing and nameplate. Estimate scope: base product / one unit; external computer, bench and auxiliary plant excluded.

Specifications, dimensions, and power requirements are approximate and subject to change without prior notice for continuous design improvements.

Product technical specifications and images may vary according to manufacturing conditions and applicable standards.

Test and configuration

Measured output / function	Solvent-extractable oil or finish (%)
Parameters selected for the method	Solvent, sample mass, temperature and duration
Verification points	Balance, temperature and solvent blank

Control and recording specification

Method-specific software and recording requirements follow. Delivered software modules are defined by the order scope.

- Method code and edition, specimen ID, operator and selected test parameters are linked to the record.
- The calculation and endpoint are defined by the selected method edition; instrument signals and operator assessments are kept distinct.
- Raw measurements, units, valid/invalid test flags and the reported result remain traceable.
- Calculations are checked against known inputs and an independent calculation; sensor channels are checked against calibration values.
- GB/T 6977:2008 ethanol recipe: $E = 100 \times (m_2 - m_1) / m_3$; m_2 is the flask after extraction, m_1 the empty flask and m_3 dry wool mass. Retain three replicate results and constant-mass weighings; calculate to three decimals and round the mean to two under GB/T 8170. Ash calculation is outside this module's scope.

Related test methods

GB/T 6504 · GB/T 6977

Listed methods are application references. Suitability is established by assessing hardware, method edition and calibration together.

Test parameters for the reviewed method

The values below were reviewed in selected clauses of the stated source edition. They are not a declaration of equivalence to a later edition or independent instrument verification.

GB/T 6504:2017 / 5.1.4-5.1.6, Annex C.4-C.6

1	Fibre oil-content Annex C rapid pressure extraction: approximately 2 g specimen, balance readability 0.1 mg and temperature control ± 1 °C; initial solvent soak 10 min. Classical Method A requires at least 2 h reflux; the instrument's approximate 15 min cycle is not every method's duration.
GB/T 6977:2008 / 1–7.5 read; ethanol application: 3.5, 4.1, 5(a–d), 6(a), 7.1–7.2, 7.5	
1	Scoured-wool ethanol extractives: three separate 5 g specimens; pre-dry at 105 ± 2 °C for 2 h, then to constant mass. Soxhlet with a constant-temperature water bath; 95% ethanol by mass, at least 20 reflux cycles at approximately 6–7 cycles/h. Dry the extract flask at 105 ± 2 °C to constant mass.
2	Auxiliary analytical balance: 200 g capacity, 0.001 g graduation; test weighings to 0.001 g. Constant mass: the difference between consecutive weighings does not exceed 0.05% of the later mass. The balance and drying oven are separate laboratory equipment; these are not instrument weight or total electrical load.
3	Configuration limit: the model's 2 g / approximately 15 min rapid extraction data are not equivalent to this Soxhlet method. A suitable 5 g Soxhlet configuration, duration and auxiliary equipment must be verified for GB/T 6977. The standard's ash and alkali-insoluble tests require separate apparatus.