

**Fast, Reliable
Evaporation and
Recovery of
Oil & Grease by
EPA Method 1664A**

**For SPE or LLE
Procedures**

Solvent Evaporation / Recovery System

SPEED-VAP™ III Solvent Evaporation System & SOLVENT TRAP Solvent Recovery System

SPEED-VAP™ III - Solvent Evaporation System

The SPEED-VAP™ III Solvent Evaporation System provides safe and fast evaporation of Oil & Grease extractions using EPA Method 1664A for either Solid Phase Extraction (SPE) or Liquid Liquid Extraction (LLE) procedures. The innovative SPEED-VAP™ III uses a precisely controlled low temperature heating system to assure a consistent and gentle heating of all samples to prevent the loss of volatile analytes. Evaporation is accelerated by applying a vacuum to create a gentle flow of air over all samples for even and consistent evaporation of n-hexane extracts. Evacuating the n-hexane vapors via vacuum allows for the use of an optional in-line SOLVENT TRAP Solvent Recovery System.

The SPEED-VAP™ III:

- Enhances laboratory productivity by reducing evaporation times by 25-50%
- Bench top design frees up valuable hood space
- Reduces operator exposure to hazardous solvents
- Ensures rapid evaporation and easy, reliable gravimetric determinations



When combined with the Horizon Technology SPE-DEX® Automated Extraction System, Oil & Grease analysis will become completely automated for improved performance, efficiency and profitability. You will achieve better precision and accuracy in your Oil & Grease analysis while significantly reducing your turn-around time.

SOLVENT TRAP - Solvent Recovery System

For the most environmentally responsible operation, equip the SPEED-VAP™ III with the optional SOLVENT TRAP to capture the n-hexane vapors. The innovative system complies with the EPA Method 1664A recovery requirement by condensing the n-hexane vapor from the exhaust gas stream, minimizing the release of n-hexane into the atmosphere. The SOLVENT TRAP Solvent Recovery System simply attaches to the exhaust line of the SPEED-VAP™ III. The SOLVENT TRAP is designed to recover up to 70% of the n-hexane solvent vapor used in Oil & Grease extractions. The solvent is collected in a flask for re-use or disposal. The built in temperature controller allows the system to be operated at the optimal recovery temperature.



Quality and Safety

The SPEED-VAP™ III includes a motorless, oil free vacuum generator for the utmost safety in evaporating flammable n-hexane. The compact vacuum generator uses compressed air to produce the vacuum. The n-hexane vapors can be safely exhausted to the optional SOLVENT TRAP Solvent Recovery System or to a hood.

Features

SPEED-VAP™ III

- Temperature controls 25-60 C +/- 0.5 C
- Uses compressed air at 2 SCFM to generate a vacuum for faster evaporation at a low temperature (approximately 15 minutes at 50 C)
- Even heating surfaces, no hot or cold spots, ensure even evaporation of extracts
- The cover has ports that create a swirling action, increasing evaporation rates
- Accommodates either nine 70-mm or five 105-mm aluminium pans to handle up to 110-ml extracts for LLE, or 90-mm disk SPE manifold or automation
- Disposable aluminium weighing pans: requires no desiccation steps; no clean-up; no retention of heat or moisture; low pan weight (2.5 gm to 6 gm) reduces the chance of weighing errors
- Bench top operation if properly vented to a fume hood
- Attaches directly to the SOLVENT TRAP Solvent Recovery System

SOLVENT TRAP

- Connects directly to the SPEED-VAP™ III
- Peltier cooled (no water required)
- Variable temperature control
- Recovers up to 70% n-hexane for proper disposal
- Collects solvent in a 500 ml erlenmeyer flask
- Bench top operation

Specifications

SPEED-VAP™ III

Air Supply: Requires compressed air; estimated maximum consumption rate of 2.0 SCFM. In the event it is not feasible to provide compressed air, contact Horizon Technology to discuss alternative vacuum sources.

Ventilation: The vacuum exhaust must be either connected to the optional SOLVENT TRAP Solvent Recovery System, or properly vented to a hood.

Dimensions: 14" W x 18" D x 6" H

Weight: 14 lbs

Power: 120 volts

SOLVENT TRAP

Dimensions: 11" W x 9.5" D x 28" H

Weight: 42 lbs

Power: 120 volts