



SPE-DEX® 3100

OIL & GREASE EXTRACTOR
For n-hexane extractable material



PREPARE FOR BETTER RESULTS



**CHROMATOGRAPHIC
SPECIALTIES INC.**
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Oil & Grease Around the World

Oil and grease (n-hexane extractable material) is a general indicator of the amount of hydrocarbons in a water supply. It is used around the world to indicate pollution and to help ensure reliable waste treatment plant operation.

In the past this measurement was often made by extracting the water with a chlorofluorocarbon solvent and infrared used for the measurement step. With concern about the ozone layer and important toxicity concerns, these solvents have been outlawed in many countries and n-hexane is now the extraction solvent of choice. A simple gravimetric measurement is used for the analytical step.

AUTOMATED SPE FOR EFFICIENCY

The SPE-DEX 3100 automates the entire extraction process, fully compliant with US EPA Method 1664A/B, ISO 11349 and Standard Methods 5520B. Operation can be summarized as follows:

1. The disk is conditioned to accept the sample
2. The system uses the original sample bottle to deliver the sample
3. The specialized solid phase extraction disk retains the oil and grease from the sample and water is sent to waste
4. The sample bottle is automatically rinsed
5. Hexane elutes the oil and grease from the solid phase extraction disk into the optional WaterTrap drying device
6. The WaterTrap dries the extract and allows only the hexane layer containing targets to pass through
7. The dry hexane extract is delivered to the receiving vessel allowing easy transfer to an aluminum pan and the Speed-Vap® IV for evaporation

For even more environmental consideration, the SolventTrap_{OG} reclaims the evaporating solvent from the Speed-Vap IV allowing for proper disposal or recycling.

INSTRUMENT CONFIGURATION

- Three independent stations for the best productivity
- Ergonomic design for comfortable operation
- Controlled airflow for increased safety operating outside a hood
- Rugged construction with plastic front for corrosion resistance
- Spill containment platform and drip tray
- Can be operated in a hood or on a bench

TOUCH-SCREEN CONTROLLER

- Color and intuitive icons make learning easy and quick
- Resident methods help speed development
- Rugged controller for easy handling
- Start up and clean methods for easy maintenance

WATERTRAP DRYING

- In-line drying for the best efficiency
- More convenient and reliable than sodium sulfate
- Eliminates sodium sulfate

PACIFIC™ SOLID PHASE EXTRACTION DISKS

- Reliable, excellent recoveries
- Available in two sizes for clean or more particulated samples
- Can be used with prefilters for especially difficult samples
- Certified to operate with automation



FULLY COMPLIANT WITH REGULATORY METHODS

- Uses the original sample bottle to dispense the sample and automatically rinses it, too
- Methanol and hexane carefully separated for the best compliance

RELIABLE FOR PROCESSING ANY SAMPLE

- Variety of prefilters for dirty samples
- Overflow sensors to pause operation before a sample is lost for better unattended operation



SAFETY CONSIDERATIONS

- CE marked
- NRTL tested
- Uses the safe Solvent Delivery System
- Less operator exposure to solvent for increased safety

GREEN FEATURES

- Less solvent used
- Less solvent waste
- SolventTrap_{OG} option to reclaim hexane from Speed-Vap IV evaporation system



THE SPE-DEX 3100 OIL & GREASE SYSTEM PROVIDES:

- **Business advantages**
 - o Three independent stations for the best match with the laboratory workload
 - o Safely walk-away for better technician time use
 - o Intuitive touch-screen controller with pre-programmed methods for rapid start-up with reduced learning curve
 - o Uses less solvent and produces less waste
- **Analytical advantages**
 - o All incoming samples can be processed, whether highly particulated or not
 - o Excellent recoveries with Pacific Premium disks
 - o Better reproducibility between multiple technicians
 - o Uses the original sample bottle and also rinses it



Horizon Technology offers a full workflow solution, including all the consumables needed

Put Our Experience To Work For You



At Horizon Technology, we recognize the importance of sample preparation as the first step in achieving better results in the analysis of semivolatile or nonvolatile organic compounds. Whether you're using GC/MS, GC, LC/MS or LC for your analysis, our extraction, drying, evaporation/concentration, solvent recovery systems and automated solutions will help you streamline your workflow while improving cost-efficiency and reproducibility.

The consumables that fuel your sample preparation must be readily available and consistently high-quality to ensure that your analyses run predictably and reproducibly. Purchase these and other items through Horizon Technology by phone or on the expanding E-store for reliable delivery and operation.

Whether you're just switching to automated sample preparation or have new employees running your equipment, Horizon can reduce the learning curve. Online videos, comprehensive instruction manuals, application notes and live technical support get you up and running quickly, while our in-house or on-site service provides fast and convenient installation, repair and maintenance of your equipment.

With our ever-expanding product line and consultative approach, we're committed to helping laboratories worldwide get their analyses off to a great start.

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