

WelView[®] Photochemical Reactor

UV Lamp Dual UV Lamp

Life 9000h

Abnormal Reminder Buzzing & Screen Light Change



P/N: 00836-00003

New Upgrade Better Experience

Welview Photochemical Reactor

- ✓ Tube ID is 0.25mm, length is 24m. Smaller the ID, sharp the peak; longer the length, more sufficient the derivatization is
- ✓ PEP, which has better light transmission than PTFE to ensure derivative effect, and PEP is the least contaminant polymer
- ✓ Dual UV lamp, for better derivative effect
- ✓ 9000h (When the light is nearing the end of its life, the screen will turn yellow)
- ✓ Yes, cooled by fan
- ✓ Yes, color LED screen
- ✓ The screen light will turn red and accompanied by a buzzer when the UV lamp is abnormal or the pipeline leaks

Other Photochemical Reactor

- Tube Size** • Tube ID is 0.5mm, length is 10/15mm
- Tube Material** • PTFE
- UV Lamp** • Single UV Lamp
- Life** • 3000h
- Cooling Method** • No
- Screen** • No
- Abnormal Reminder** • No

Product Parameters

Max. pressure of the pipeline	300psi(207bar)
Max. flow rate	3mL/min
Pipeline ID	0.25mm
Pipeline length	24m
Pipeline material	FEP Material with Excellent Solvent Resistance
Ultraviolet lamp	Dual Lamp Design for Enhanced Derivatization Effects
Ultraviolet lamp service life	Approximately 9000 Hours of Lifespan with Timely Alerts (LED indicator, buzzer)
Interference resistance	Resistant to Electrical Interference

Temperature Control Mode	Air-Cooled
Connector	PEEK
Lamp Holder	Equipped with a Switch
Power Supply	220V/50Hz
Power	30W
Dimensions	88x404x80(WxDxH)mm
Weight	3.0kg
Temperature	0~45°C
Relative Humidity	≤85%

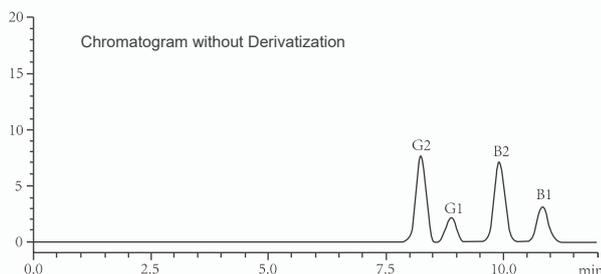
Application

1. Detection of Aflatoxins:

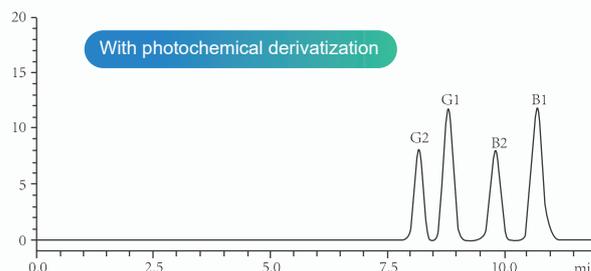
Due to the inherent strong fluorescence of aflatoxins B1 and G1, it becomes challenging to detect them using liquid chromatography when their fluorescence is quenched upon contact with water, leading to a nearly disappearance of fluorescence. To overcome this limitation, the photochemical derivatization method can be employed to enhance the fluorescence of aflatoxins B1 and G1.

Column: Welch Ultisil® XB-C18, 5µm, 4.6×150mm
 Mobile Phase: Methanol:Water = 45:55
 Flow Rate: 0.8mL/min

Detector: Fluorescence detector, Excitation Wavelength 360nm, Emission Wavelength 440nm
 Injection Volume: 20-100µL
 Photochemical Derivatization System: Photochemical derivatizer (connected after the chromatography column, then directed towards the fluorescence detector)



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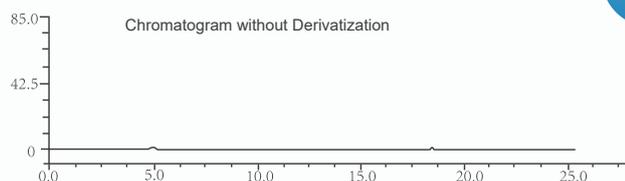
2. Detection of Sulfonamide Drugs:

Sulfadiazine (SDZ), Sulfapyridine (SPD), Sulfamerazine (SMR), Sulfadimidine (SM2), Sulfamethoxydiazine (SMD), and Sulfaguinoxaline (SQX) originally lack fluorescence, while after derivatization using a photochemical derivatizer, these six sulfonamides exhibit fluorescence.

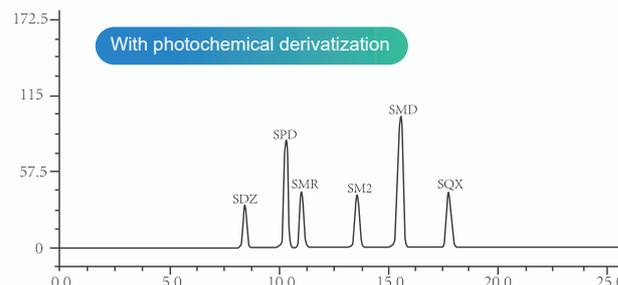
Column: Welch Ultisil® XB-C18, 5µm, 4.6×150mm
 Flow Rate: 1.0mL/min
 Detector: Excitation wavelength 232nm, Emission wavelength 400nm
 Injection Volume: 20-100µL

Gradient program:

Time(min)	Acetonitrile (%)	Water(%)
0~15	18	82
15~25	40	60
25~30	18	82



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Product Installation

1. Remove all products from the packaging box and connect the power cord to the device.
2. Unscrew the two PEEK connectors separately from the stainless steel union; there is no directional restriction for the tubing.
3. Connect one end of the tubing to the HPLC column, leaving the other end temporarily unconnected to the detector. Flush with the mobile phase for 5 minutes, then connect to the fluorescence detector.
4. Turn on the UV 254nm UV lamp power supply and proceed with sample injection analysis.

Packing List

Please confirm that all parts and components have come with the device. If there are any issues, please contact our company or the local supplier as soon as possible.

No.	Description
1	Photochemical reactor × 1
2	Power cord × 1
3	1/16" PEEK connectors × 2, 1/16" stainless steel union × 1
4	Product manual × 1