

**ELITE**



# **Agress 1100+**

High Performance Liquid  
Chromatography System

# Company Profile

Suzhou Elite Technology Co., Ltd. is a high-tech enterprise specializing in the R&D, production, and sales of scientific instruments, with a particular focus on liquid chromatography. Our products cover a wide range of fields, including chromatography, preparative separation, and in vitro diagnostics. Our main offerings include high-performance liquid chromatography systems, chromatography workstation software, LC-MS systems, gas chromatography systems, preparative purification chromatography systems, metering pumps, columns, and related accessories.

Our customers are widely distributed across research institutions, universities, pharmaceutical companies, the food industry, the petrochemical sector, as well as environmental protection and testing agencies.

For 30 years since our founding, Elite Technology has been growing and flourishing. Throughout these years, we have remained committed to innovation and exploration. Not only have we continuously improved our chromatography product lines, but we have also provided users with a wealth of method development and application cases, ensuring prompt pre-sales support and outstanding after-sales service. We have devoted ourselves to the field of liquid chromatography, successfully building an exceptional brand defined by elite products.

For thirty years, we have remained steadfast in independent R&D, ensuring full control over every stage of our products' lifecycle. With a customer-centric approach, we are dedicated to solving real-world challenges, advancing high-quality and rational domestic alternatives, and creating greater value for our customers.

## Awards & Honors

- National Torch Program Key High-Tech Enterprise (2011)
- Project Certificate of National Torch Program (2008)
- BCEIA Gold Award (1993, 2003, 2013, 2015)
- CISILE Independent Innovation Gold Award (2007, 2013)
- CISILE Independent Innovation Silver Award (2009)
- ANTOP Award for Excellence in Domestic Replacement of Key Components (2017)
- Third Prize of CAIA Science and Technology Award (2015)
- Liaoning Province Intellectual Property Advantageous Enterprise (2016)
- National Intellectual Property Advantageous Enterprise (2017)
- First Prize of Dalian Science and Technology Progress Award (2016, 2018)
- Third Prize of Liaoning Province Science Progress Award (2017)
- Third Prize of Liaoning Provincial Patent Award (2019)
- Listed Enterprise of SIP "Specialization, Refinement, Differentiation, and Innovation" Plan (2022)
- Listed Enterprise of Liaoning Provincial "Specialization, Refinement, Differentiation, and Innovation" Plan (2024)



# Agress 1100+ High Performance Liquid Chromatography System



## Features

- Compatible with both normal-phase and reversed-phase solvents, suitable for use in GPC systems, and supports solvent exchange.
- An optimized, high-efficiency heat dissipation structure ensures stable system operation under demanding condition.
- The fully upgraded sealing design minimizes system performance degradation and consistently delivers accurate test results.
- The front panel is coated with a corrosion-resistant finish, enhancing the product's durability against a wide range of solvents.
- Compatible with Kromstation and Rubikstation chromatography workstations (network versions), compliant with data integrity regulations.

# P 1100+ High-Pressure Constant-Flow Pump

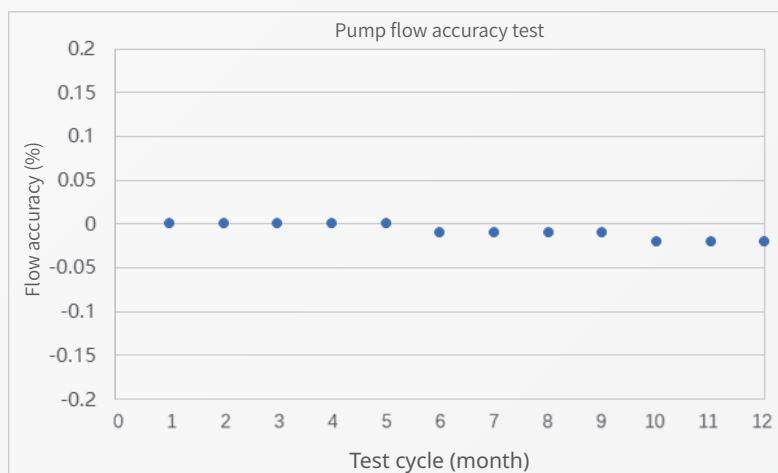


## Features

- The floating guided plunger design, combined with a high-quality plunger rod and sealing ring, ensures stable and durable operation of the system.
- The dual-plunger, in-series reciprocating mechanism is combined with a compact cam-driven short-stroke design to deliver minimal and stable pump pulsation.
- The stepper motor with microstepping control ensures stable gradient and mobile phase composition.
- Dual correction for mobile phase compressibility and flow rate ensures accurate flow delivery.
- Real-time pressure display with upper/lower pressure limit alarm function.
- Pressure unit displayed can be set to MPa, psi, or bar.

## Pump Flow Accuracy

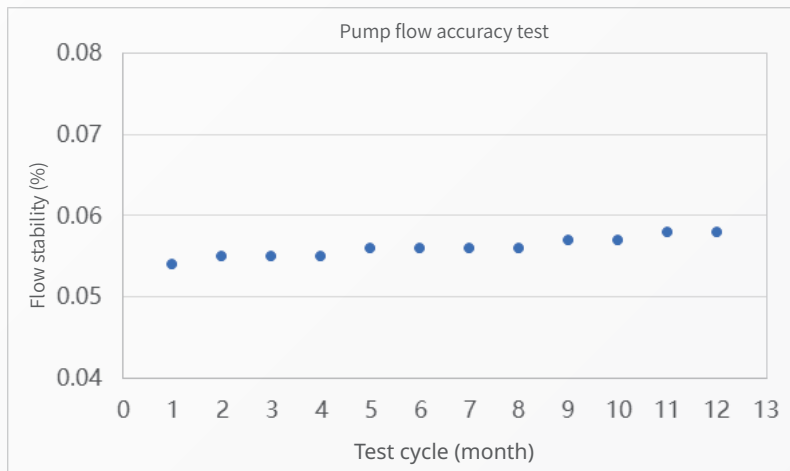
During the 12-month test period, the flow accuracy of the P1100+ high-pressure constant-flow pump ranged from -0.02% to 0, demonstrating the pump's excellent flow stability, which ensures the reliability of the test results.



# P1100+ High-Pressure Constant-Flow Pump

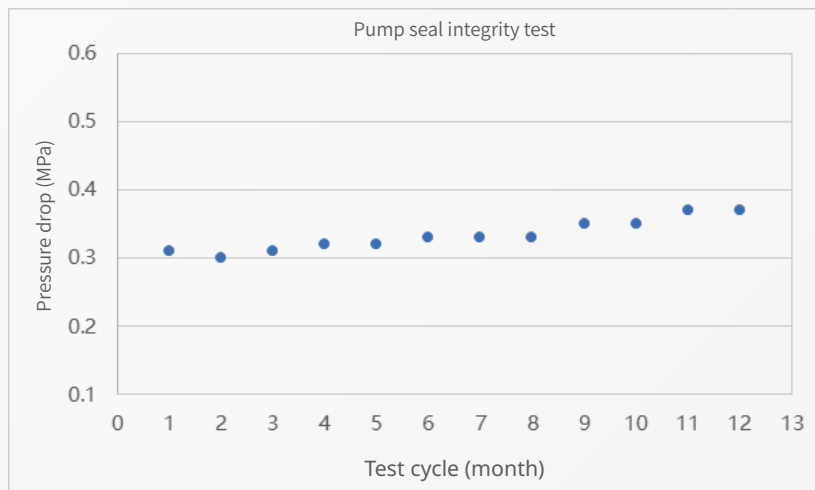
## ● Pump Flow Stability

During the 12-month test period, the flow stability of the P1100+ high-pressure constant-flow pump ranged from 0.054% to 0.058%, demonstrating the pump's excellent stability, which ensures the reproducibility of the test results.



## ● Pump Seal Integrity

During the 12-month test period, the pressure drop of the P1100+ high-pressure constant-flow pump ranged from 0.31 MPa to 0.37 MPa, demonstrating the pump's high quality, which ensures durability and reliability over prolonged operation.



# D 1100+ UV-Vis Detector

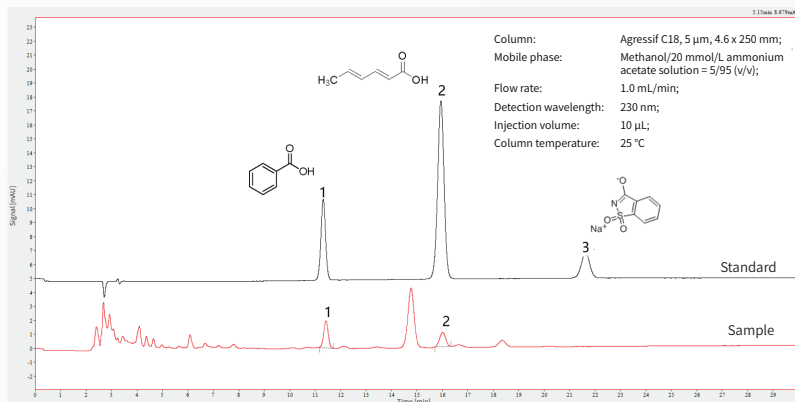


## ● Features

- Optimized light path heat dissipation structure ensures stable performance with low noise and minimal drift.
- The grating rotation mechanism is driven by a high-precision stepper motor, ensuring excellent accuracy of the detection wavelength.
- Automatic spectral scanning facilitates the selection of optimal wavelength for sample analysis.
- Programmable wavelength-time switching approach enables sensitive detection of different sample components.
- The detection cell features high pressure resistance, effectively expanding the flow rate range.

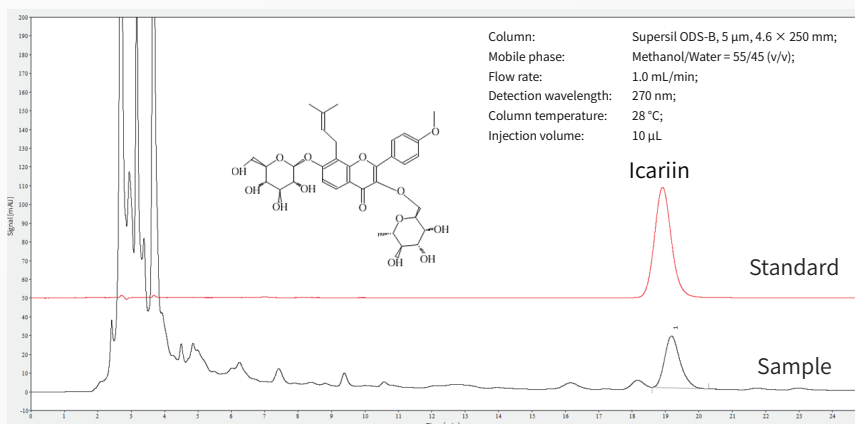
# Agress 1100+ HPLC Applications

## Determination of benzoic acid, sorbic acid, and saccharin sodium in prepared food



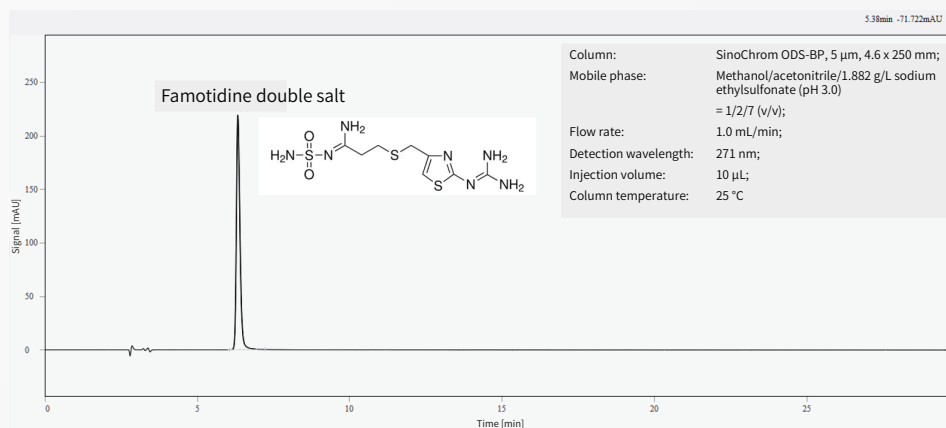
Chromatogram of prepared food sample and standard: peak 1 is benzoic acid, peak 2 is sorbic acid, and peak 3 is saccharin sodium.

## Testing of Rong Gui Bu Shen Oral Liquid



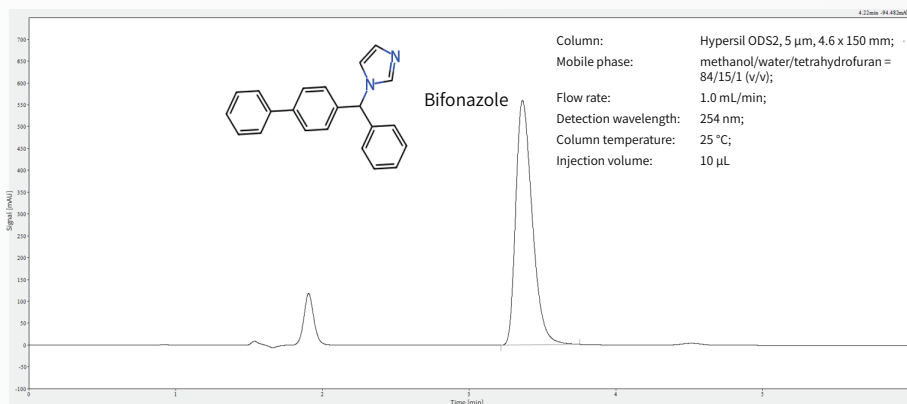
Chromatograms of Rong Gui Bu Shen Oral Liquid sample and icariin standard

## Testing of famotidine double salt



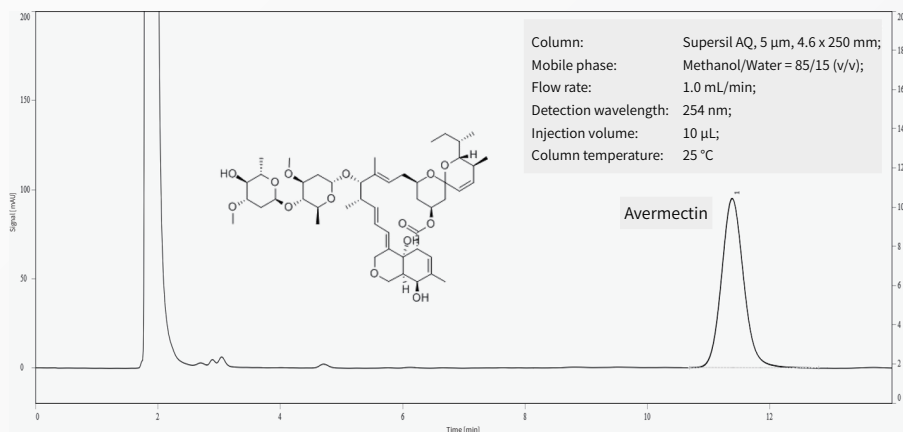
Chromatogram of famotidine double salt (sample dissolved in mobile phase)

## Testing of bifonazole cream



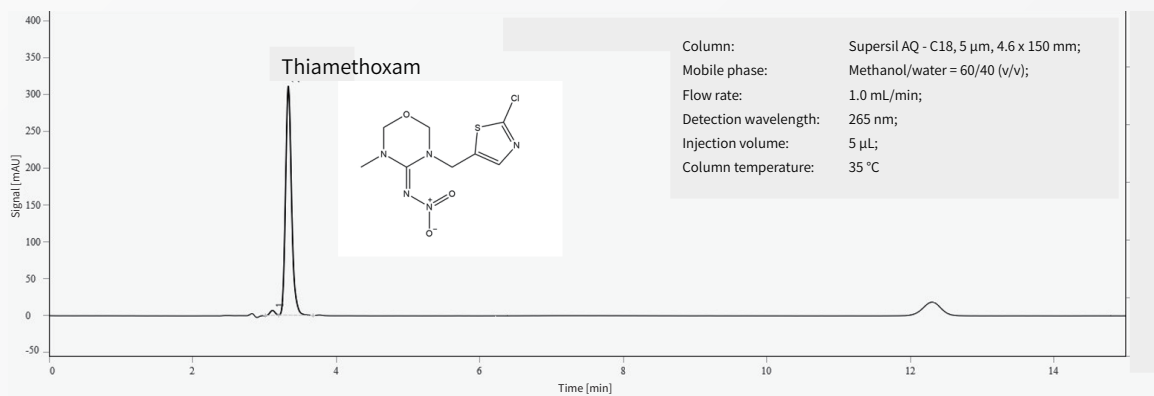
Chromatogram of bifonazole cream sample

## Determination of avermectin in veterinary drug



Chromatogram of avermectin

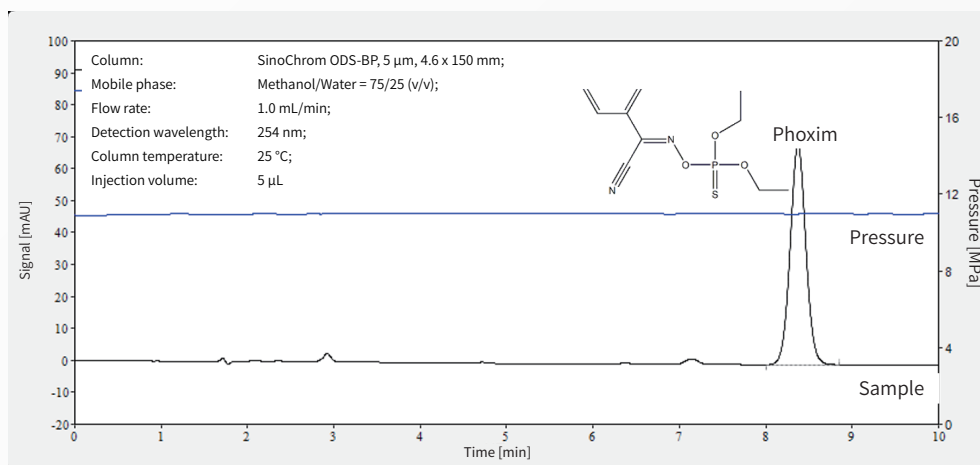
## Testing of the granular pesticide thiamethoxam



Chromatogram of the granular pesticide thiamethoxam

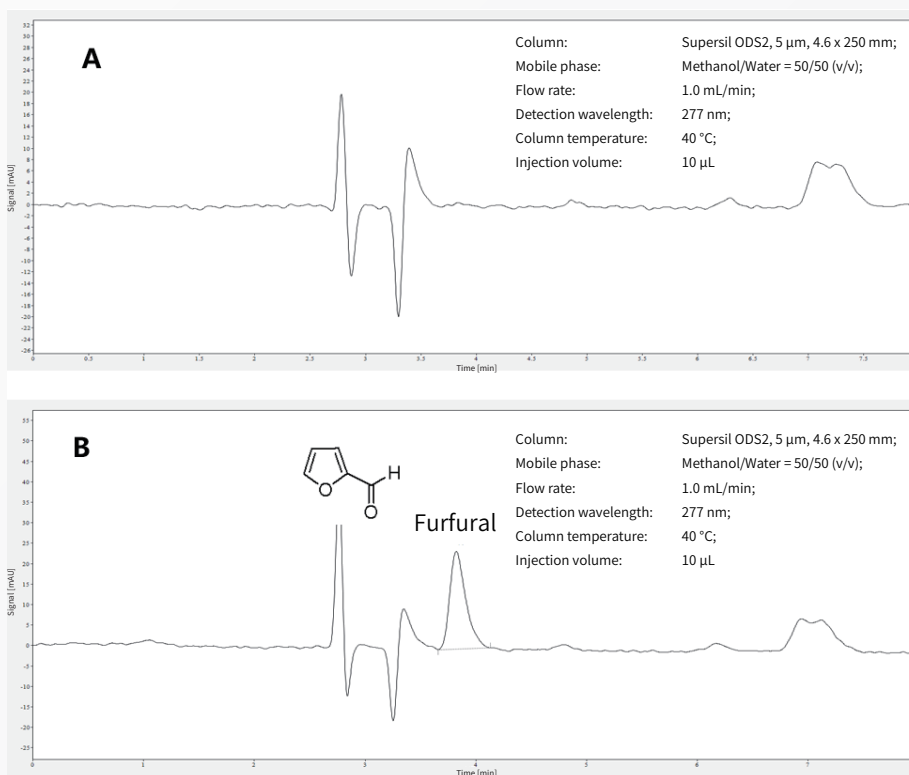
# Aggress 1100+ HPLC Applications

## Determination of crude phoxim



Chromatogram of crude phoxim

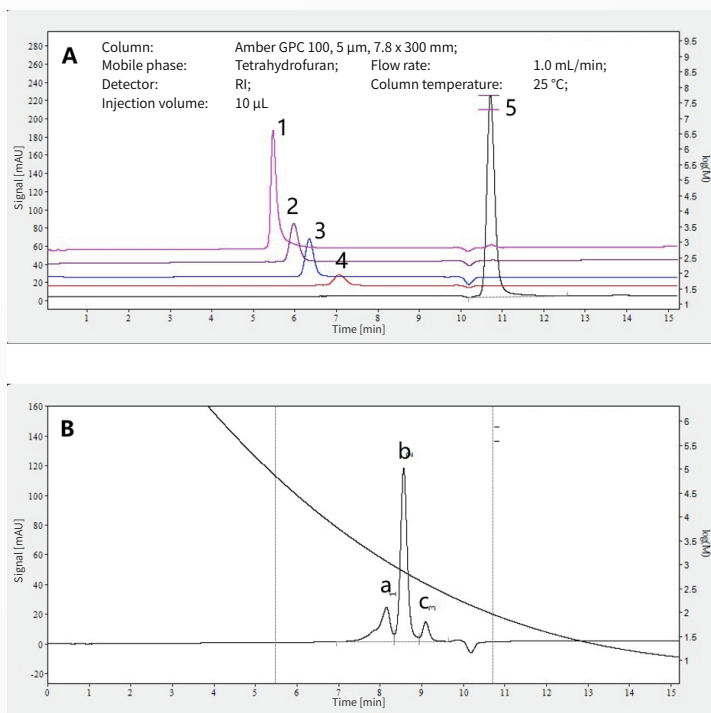
## Determination of furfural in transformer oil



Chromatogram of transformer oil sample: (A) Chromatogram of transformer oil sample; (B) Chromatogram of transformer oil sample spiked with furfural standard.



## ● Molecular weight determination of polyurethane acrylate

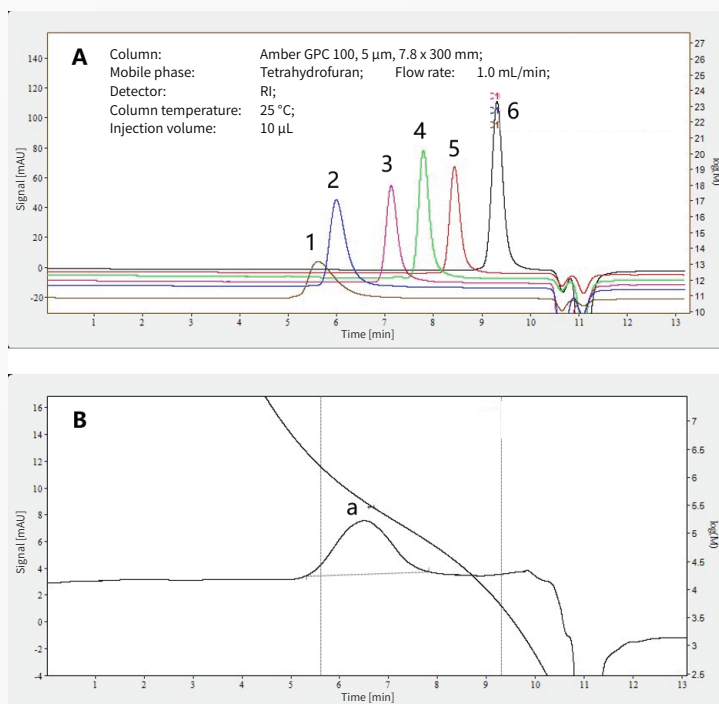


(A) Overlaid chromatograms of polystyrene and toluene standards:

peak 1 is polystyrene MW 74000,  
 peak 2 is polystyrene MW 28500,  
 peak 3 is polystyrene MW 16600,  
 peak 4 is polystyrene MW 5110, and  
 peak 5 is toluene MW 92;

(B) Chromatogram of polyurethane acrylate sample. The weight-average molecular weight of the main components in the samples measured by size exclusion chromatography is between 400 and 1500.

## ● Molecular weight determination of silicone rubber



(A) Overlaid chromatograms of polystyrene standards:

peak 1 is polystyrene MW 1571000,  
 peak 2 is polystyrene MW 758900,  
 peak 3 is polystyrene MW 171000,  
 peak 4 is polystyrene MW 74000,  
 peak 5 is polystyrene MW 28500, and  
 peak 6 is polystyrene MW 5110;

(B) Chromatogram of the silicone rubber sample. The weight-average molecular weight of the main component in the sample measured by size exclusion chromatography is MW 477900.



**About Elite**

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