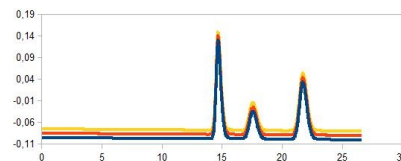
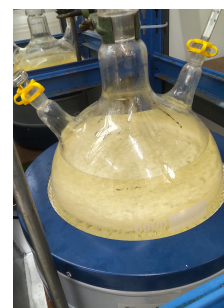
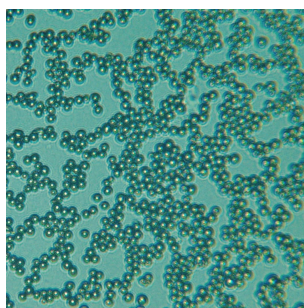
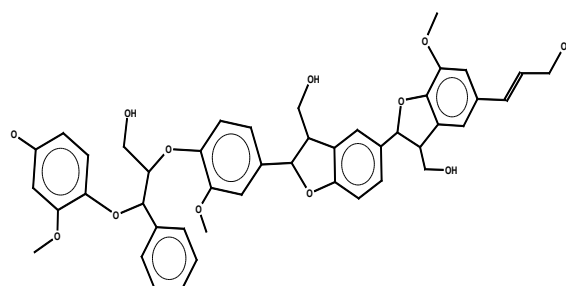
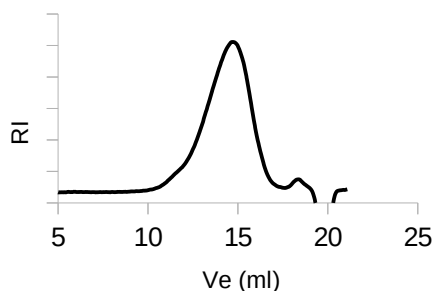
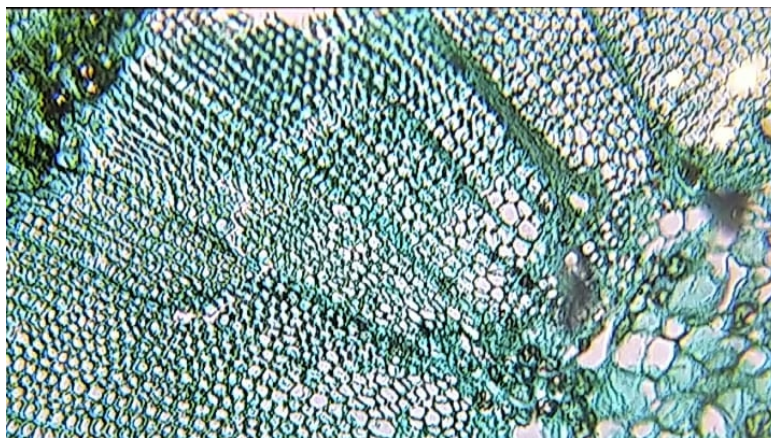


GPC / SEC / HPLC Columns

Made by AppliChrom GmbH



AppliChrom DMSO-Phil-P



AppliChrom DMSO-Phil-P

Special GPC/SEC media for fast, accurate and robust GPC-analysis in DMSO

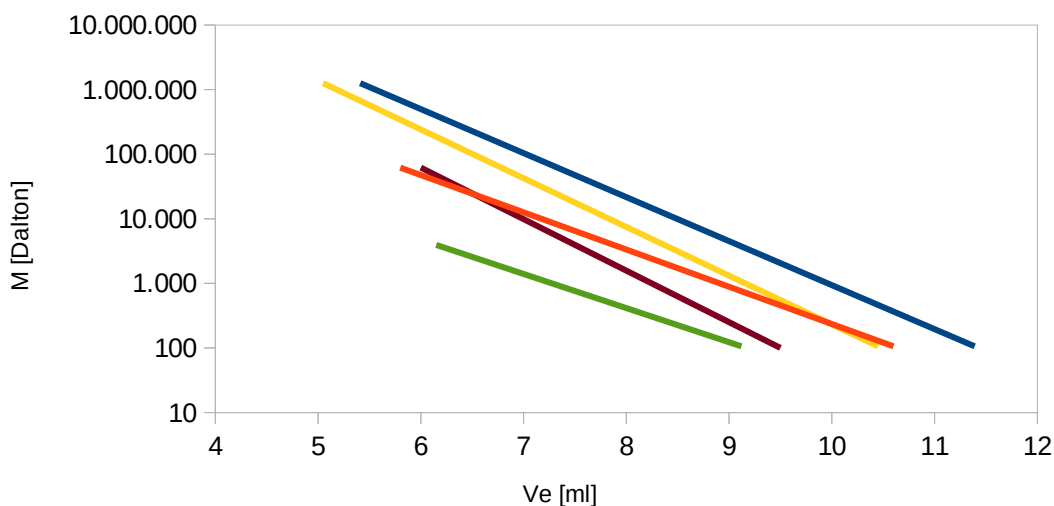
For GPC / SEC analysis in DMSO, examples:

- amylose, amylopectin, starch
- urea-formaldehyd resins (UF-resins)
- melamin-urea-formaldehyd resins (MUF-resins)
- lignins, humic substances, humic acids, coniferous wood bark essences
- polysaccharide, polysaccharid derivatives
- poly(N-isopropylacrylamid) PNIPA
- poly-vinylpyridin
- calibration: pullulan, dextran, polyvinylpyridin et al.

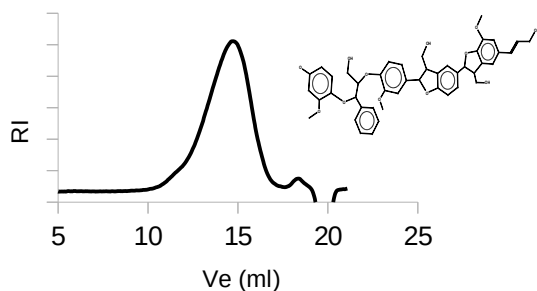
Advantages

- optimized for DMSO-GPC applications
- interactionfree pure GPC/SEC
- easy, reliable and robust GPC/SEC-calibration by dextrans, pullulans et al.
- low column bleeding for low detectornoise for improved lightscattering or viscosity detection
- 12 μ particle technology for low backpressure
- large porevolume and optimized mass transfer for polymers giving optimized resolution
- low costs caused by long livetime of column – result of combination of optimized proprietary particle and packingtechnology.

Measuring range of selected AppliChrom DMSO-Phil-P GPC/SEC-columns, 300x8mm, poresizes
100, 200, 250, 350, 400

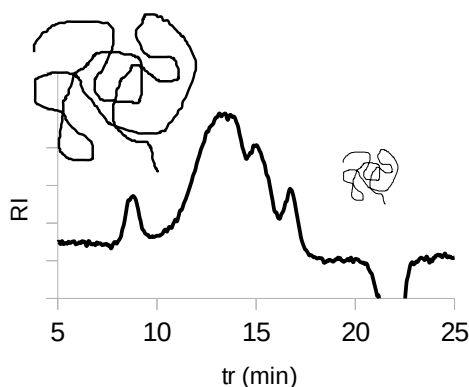


Different pore sizes available



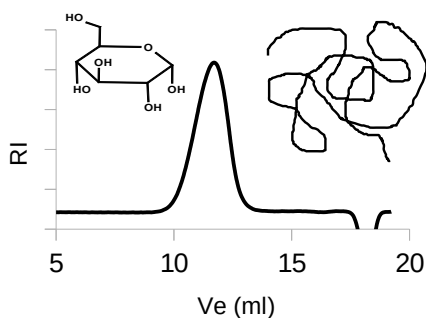
Analyte: Lignin conifer bark extracts

Column: AppliChrom DMSO-Phil-P-250
AppliChrom DMSO-Phil-P-350
Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.5ml/min
Temperature: 80°C
Detection: RI



Analyte: Spruce bark extract

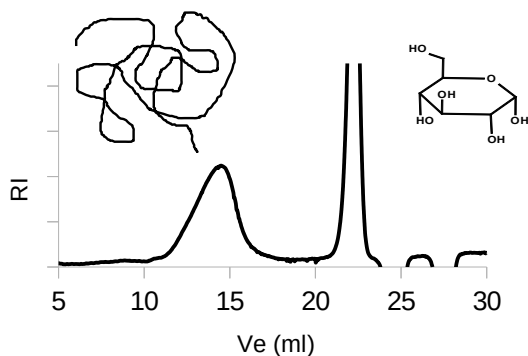
Column: AppliChrom DMSO-Phil-P-250
Dimension: 2x 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.5ml/min
Temperature: 80°C
Detection: RI



Analyte: Polysaccharide

(M ca. 70 000Da)

Column: AppliChrom DMSO-Phil-P-250
AppliChrom DMSO-Phil-P-350
Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.5ml/min
Temperature: 80°C
Detection: RI

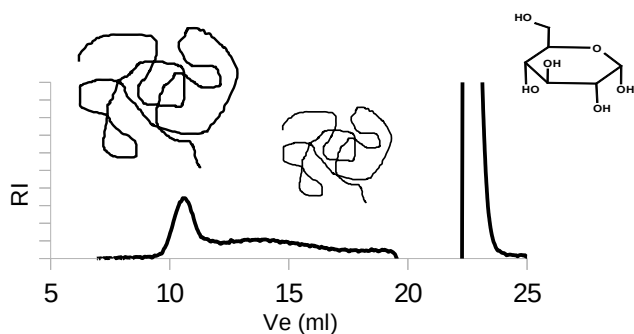


Analyte: Dextran 650

Dextran from Leuconostoc spp.,
M = 450 000-650 000Da + fructose

Column: AppliChrom DMSO-Phil-P-200
AppliChrom DMSO-Phil-P-250
AppliChrom DMSO-Phil-P-350
Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.5ml/min
Temperature: 80°C
Detection: RI

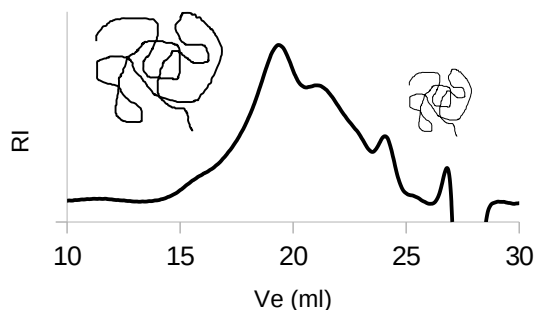
Many applications for DMSO



Analyte: Pea starch

Column: AppliChrom DMSO-Phil-P-200
AppliChrom DMSO-Phil-P-250
AppliChrom DMSO-Phil-P-350

Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.5ml/min
Temperature: 80°C
Detection: RI

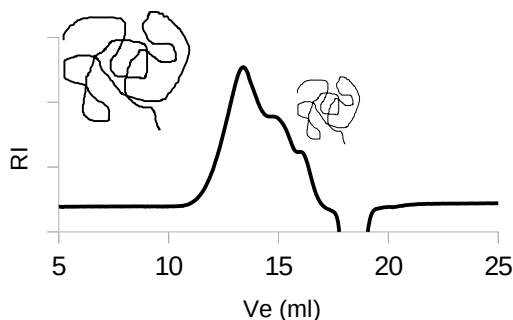


Analyte: MUF-resin

completely DMSO-soluble melamin-urea formaldehyd resin (MUF-resin)

Column: AppliChrom DMSO-Phil-P-200
AppliChrom DMSO-Phil-P-250
AppliChrom DMSO-Phil-P-350

Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.5ml/min
Temperature: 80°C
Detection: RI
Injection: 50µl sample

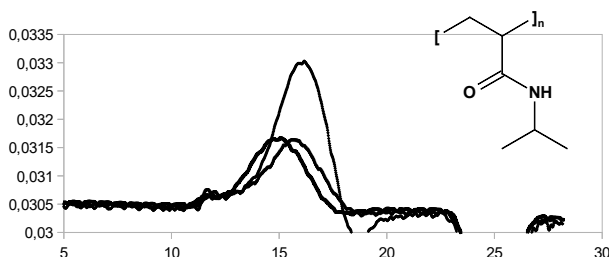


Analyte: UF-resin

DMSO-soluble urea formaldehyd resin

Column: AppliChrom DMSO-Phil-P-200
AppliChrom DMSO-Phil-P-350

Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.5ml/min
Temperature: 80°C
Detection: RI



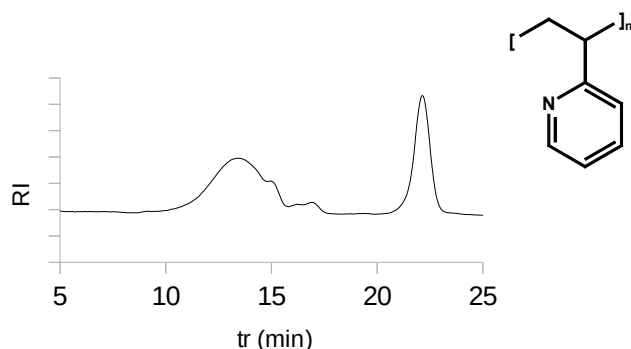
Analyte: Poly(N-isopropylacrylamide)

Further denominations: PNIPA, PNIPAAm, NIPA, PNIPAA or PNIPAm. CAS [25189-55-3], formula: (C₆H₁₁NO)_n

3 different PNIPA fractions

Column: AppliChrom DMSO-Phil-P-300

Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.5ml/min
Temperature: 80°C
Detection: RI

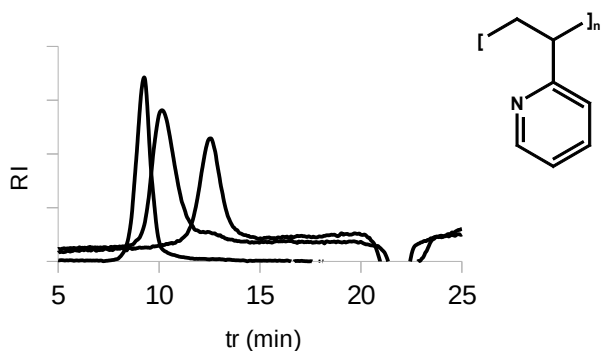


Analyte: Polyvinylpyridine degraded

Further denominations: CAS 25014-15-7, (C₇H₇N)_n
low molecular weight (oligomeric) polyvinylpyridin fraction

Column: AppliChrom DMSO-Phil-P-250

Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.4ml/min
Temperature: 50°C
Detection: RI

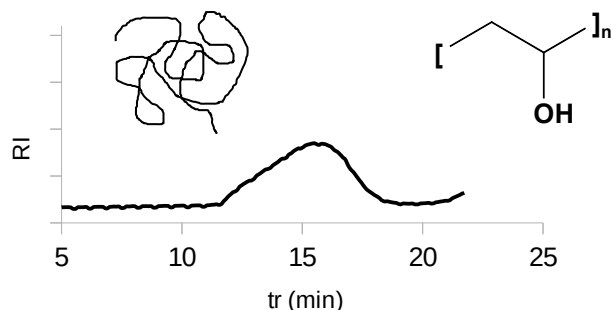


Analyte: Polyvinylpyridine fractions

Further denominations: CAS 25014-15-7, (C₇H₇N)_n
75.7kDa, 20.9kDa, 3.2kDa
Superposition of 3 different polyvinylpyridin fractions

Column: AppliChrom DMSO-Phil-P-250

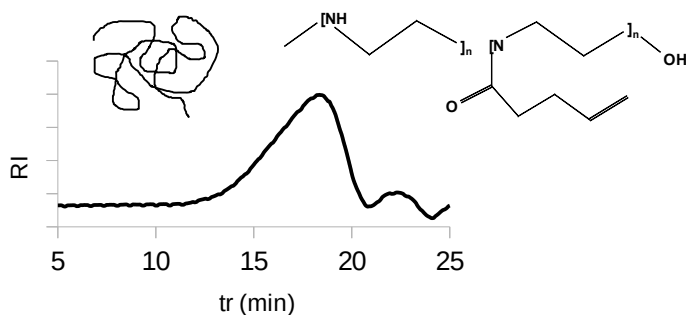
Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.4ml/min
Temperature: 50°C
Detection: RI



Analyte: Polyvinylalcohol M=22kDa

Column: AppliChrom DMSO-Phil-P-300

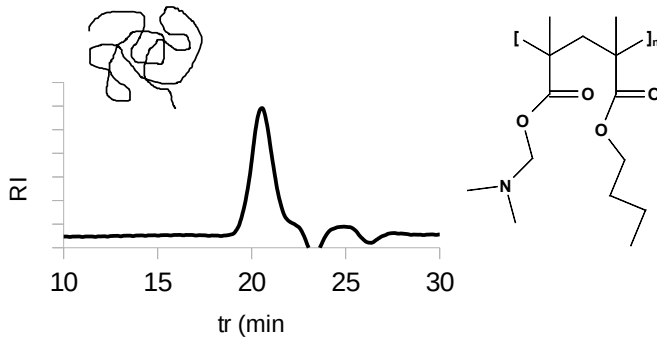
Dimension: 2x 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.4ml/min
Temperature: 50°C
Detection: RI



**Analyte: Poly[2-(butenyl)2-oxazoline-co-ethylenimine]
M = 50 000Da**

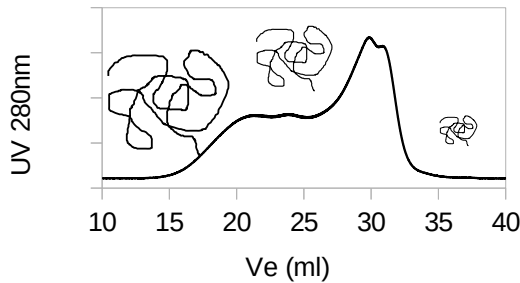
Column: AppliChrom DMSO-Phil-P-300

Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.4ml/min
Temperature: 50°C
Detection: RI



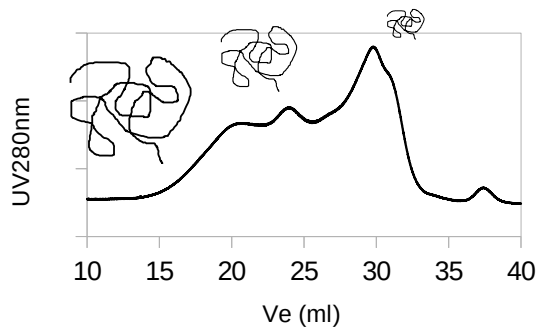
Analyte: Polybutyl methacrylate/
Poly(dimethylaminoethylmethacrylate) M=22kDa

Column: AppliChrom DMSO-Phil-P-300
Dimension: 2x 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.4ml/min
Temperature: 50°C
Detection: RI



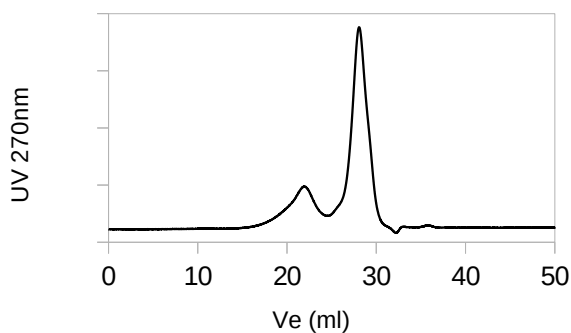
Analyte: Pea protein GPC
covering the calibration range of 100-1 000 000Da (based on dextrans)

Column: AppliChrom DMSO-Phil-P-Multipore
Dimension: 3x 300mm x 8mm
Mobil Phase: DMSO
Flow: 0.4ml/min
Temperature: 55°C
Detection: UV 280nm
Calibration: vs. Dextran, pullulan or protein



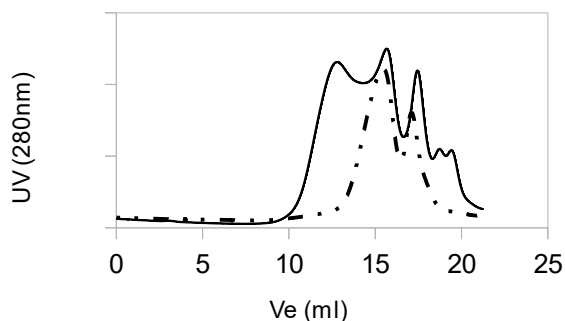
Analyte: Soy protein GPC
covering the calibration range of 100-1 000 000Da (based on dextrans)

Column: AppliChrom DMSO-Phil-P-Multipore
Dimension: 3x 300mm x 8mm
Mobil Phase: DMSO
Flow: 0.4ml/min
Temperature: 55°C
Detection: UV 280nm
Calibration: vs. Dextran, pullulan or protein



Analyte: Manuka honey protein GPC
covering the calibration range of 100-1 000 000Da (based on dextrans)

Column: AppliChrom DMSO-Phil-P-Multipore
Dimension: 3x 300mm x 8mm
Mobil Phase: DMSO
Flow: 0.4ml/min
Temperature: 40°C
Detection: UV 270nm
Calibration: vs. Dextran, pullulan or protein

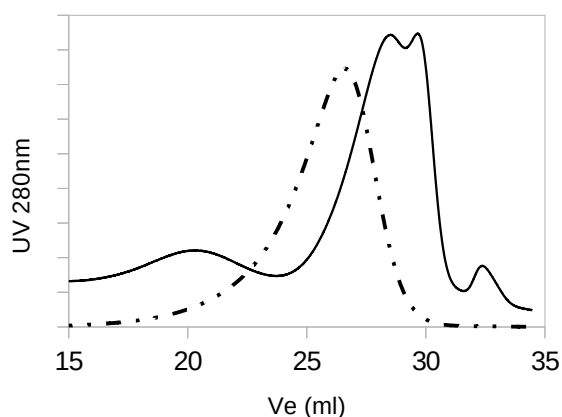


Analyte: Caramel color GPC

(range: 100Da-1 500 000Da)
SEC / GPC comparison of 2 Caramel
Color

Column: AppliChrom DMSO-Phil-P-100
AppliChrom DMSO-Phil-P-350

Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0.075M NaNO₃
Flow: 0.3ml/min
Temperature: 60°C
Detection: UV 280nm

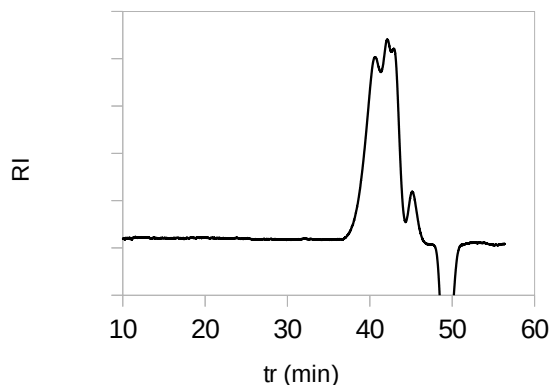


Analyte: Humic acids / humates GPC

(range: 100-1 500 000Da)
SEC / GPC comparison GPC / SEC
comparison of 2 different humic acids /
humates

Column: AppliChrom DMSO-Phil-P-Multipore

Dimension: 3x 300mm x 8mm
Mobile Phase: DMSO
Flow: 0.4ml/min
Temperature: 70°C
Detection: UV 280nm

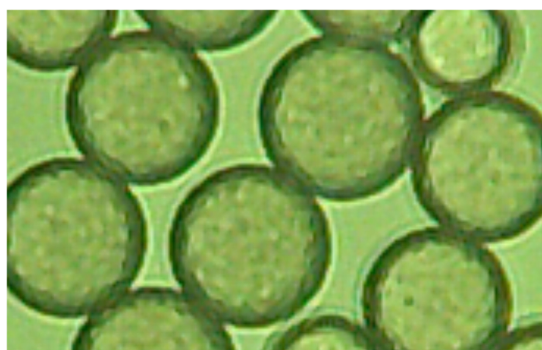


Analyte: Melamin GPC

(range: 100-1 500 000Da)

Column: AppliChrom DMSO-Phil-P-100
AppliChrom DMSO-Phil-P-350

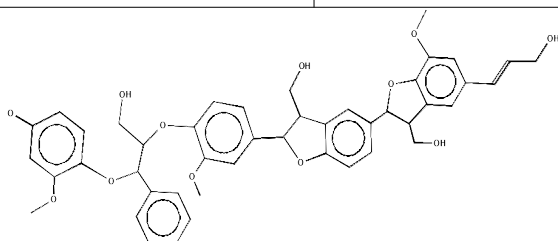
Dimension: ea. 300mm x 8mm
Mobil Phase: DMSO / 0,075M NaNO₃
Flow: 0.4ml/min
Temperature: 60°C
Detection: RI



GPC-material – particle size uniformity

AppliChrom DMSO-Phil-P

Catalog #	Description	Dimension	Separation Range
SADP1002508 SADP1003008 SADP100508 SADP100308	AppliChrom DMSO-Phil-P-100	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	100Da-2 500Da
SADP2002508 SADP2003008 SADP200508 SADP200308	AppliChrom DMSO-Phil-P-200	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	100Da-20 000Da
SADP2502508 SADP2503008 SADP250508 SADP250308	AppliChrom DMSO-Phil-P-250	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	100Da-70 000Da
SADP3002508 SADP3003008 SADP300508 SADP300308	AppliChrom DMSO-Phil-P-300	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	1 000Da-300 000Da
SADP3502508 SADP3503008 SADP350508 SADP350308	AppliChrom DMSO-Phil-P-350	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	1 000Da-1 000 000Da
SADP4002508 SADP4003008 SADP400508 SADP400308	AppliChrom DMSO-Phil-P-400	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	10 000Da-5 000 000Da
SADP4502508 SADP4503008 SADP450508 SADP450308	AppliChrom DMSO-Phil-P-450	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	50 000Da→10 000 000Da
SADP6002508 SADP6003008 SADP600508 SADP600308	AppliChrom DMSO-Phil-P-600	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	→ 20 000 000Da
SADPM2508 SADPM3008 SADPM508 SADPM308	AppliChrom DMSO-Phil-P-Multipore	250mm x 8mm 300mm x 8mm 50mm x 8mm 30mm x 8mm	100Da – 1 000 000Da



Lignin

A general guarantee for the functionality with all analytes cannot be given. In individual cases, it is always advisable to discuss the issue with our product specialists. An application laboratory is also available in Oranienburg for your service. Please contact us.

Errors and changes excepted. Research and development products.

Not tested for clinical, diagnostic, or food use.

Version 11/2021

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To place an order please fill in this form and send it by mail or fax to:

AppliChrom GmbH
Germendorfer Allee 20
D-16515 Oranienburg
Germany

Telephone: +49 (0)3301 579293
Fax: +49 (0)3301 209879
Email: info@applichrom.co
Web: www.applichrom.com

Catalog	Description	Dimension

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e-mail	
VAT-number	
comment	

