

AppliChrom® ABOA SugarSep

for HPLC analysis of

- sugars
- sugar alcohols
- alcohols
- carboxylic acids

Special polymer for fast and reliable determination using HPLC-RI or HPLC-ELSD between 60-80°C.

Advantages:

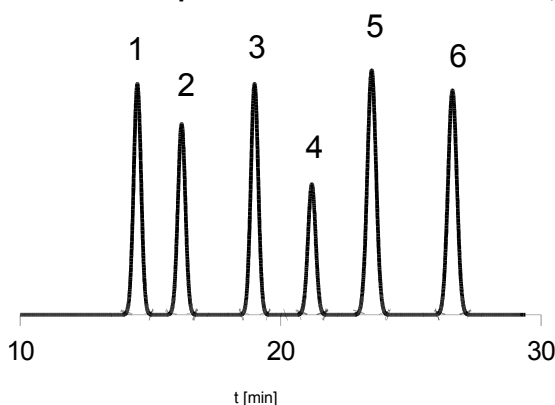
- No need for cost intensive organic eluent: eluent = water.
- Environmentally friendly: eluent = water
- Low prices for disposal of eluent as eluent = water
- Easy to handle, measurement direct from aqueous sample possible
- Low investment costs: measurement with standard HPLC-system if RI detector or ELSD (evaporative light scattering detector) is connected

AppliChrom ABOA SugarSep-Ca – analysis of sugars, sugar alcohols and alcohols

AppliChrom ABOA SugarSep-Pb – analysis of sugars, especially wood hydrolysates

AppliChrom ABOA SugarSep-H – analysis of sugars, sugar alcohols, alcohols and carboxylic acids

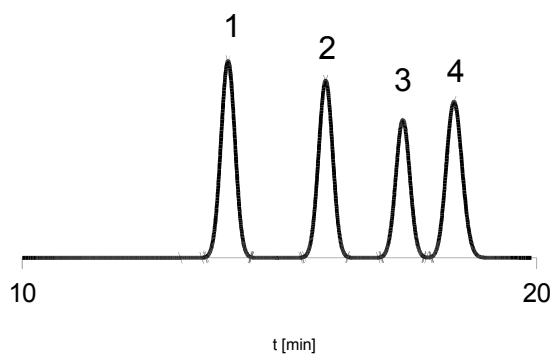
Separation of monosaccharides, disaccharides, sugar alcohols and glycerin



AppliChrom® ABOA SugarSep-Ca

300x8mm
0.5ml/min H₂O
80°C
RI-detection
20µl
peaks in order of elution, V_e [min]

1. sucrose
2. glucose
3. fructose
4. glycerin
5. mannitol
6. sorbitol



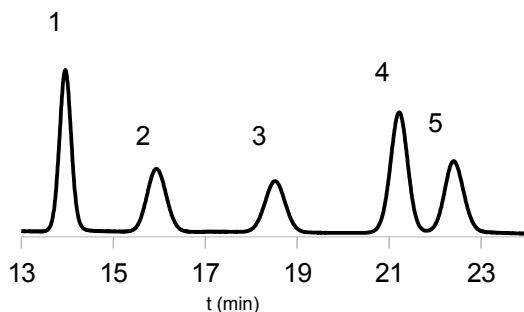
AppliChrom® ABOA SugarSep-Pb

300x8mm
0.4ml/min H₂O
60°C
RI-detection
20µl
peaks in order of elution, V_e [min]

1. sucrose
2. glucose
3. fructose
4. glycerin

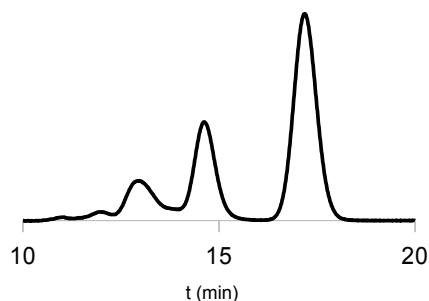
AppliChrom® ABOA SugarSep

Separation of sucrose, glucose, fructose, glycerin, ethanol & honey sample:



AppliChrom® ABOA SugarSep-Ca

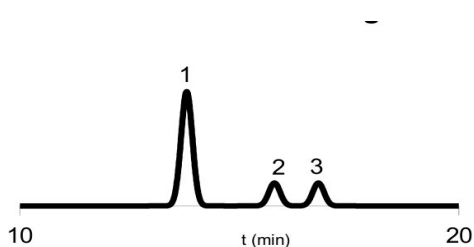
300x8mm
0.5ml/min H₂O
80°C
RI-detection
20µl
peaks in order of elution, V_e [min] – selectivity interesting for wine analysis
1. sucrose
2. glucose
3. fructose
4. glycerin
5. ethanol



AppliChrom® ABOA SugarSep-Ca

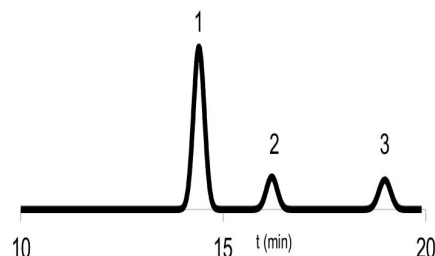
300x8mm
0.5ml/min H₂O
80°C
RI-detection
20µl honey sample

Separation of mono- and disaccharides



HPLC analysis of a cola drink with
AppliChrom® ABOASugarSep-Pb

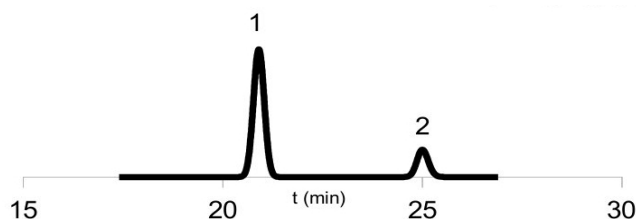
300x8mm
0.4ml/min H₂O
60°C
RI-detection
20µl
Peaks in order of elution [min]
1. Sucrose
2. Glucose
3. Fructose



HPLC analysis of a cola drink with
AppliChrom® ABOASugarSep-Ca

300x8mm,
0.5ml/min H₂O
75°C
RI-detection
20µl
Peaks in order of elution [min]
1. Sucrose
2. Glucose
3. Fructose

Fermentation control



AppliChrom® ABOA SugarSep-H

300x8mm,
0.4ml/min 0.1% H₂SO₄,
75°C
RI-detection
20µl
Peaks in order of elution V_e [min]:
1. glucose
2. DL-lactic acid (Milchsäure),

Ordering informations:

SASH102508	HPLC-Column AppliChrom® ABOA SugarSep-H, 10 μ 250mm x 8mm	Price is available upon request
SASH103008	HPLC-Column AppliChrom® ABOA SugarSep-H, 10 μ 300mm x 8mm	Price is available upon request
SASPB102508	HPLC-Column AppliChrom® ABOA SugarSep-Pb, 10 μ 250mm x 8mm	Price is available upon request
SASPB103008	HPLC-Column AppliChrom® ABOA SugarSep-Pb, 10 μ 300mm x 8mm	Price is available upon request
SASCA102508	HPLC-Column AppliChrom® ABOA SugarSep-Ca, 10 μ 250mm x 8mm	Price is available upon request
SASCA103008	HPLC-Column AppliChrom® ABOA SugarSep-Ca, 10 μ 300mm x 8mm	Price is available upon request

Precolumns and different column dimension, different counterions... (AppliChrom® ABOA SugarSep-Na,...) available on request

Please feel free to ask for your special price!

AppliChrom products for sugar & polysaccharide characterisation (HPLC, HILIC, GPC/SEC)

- Monomeric sugars/sugar alcohols
- Dimer and oligomeric sugars
- Oligomeric and polymeric sugars, polysaccharide derivatives

HPLC & HILIC methods for saccharides

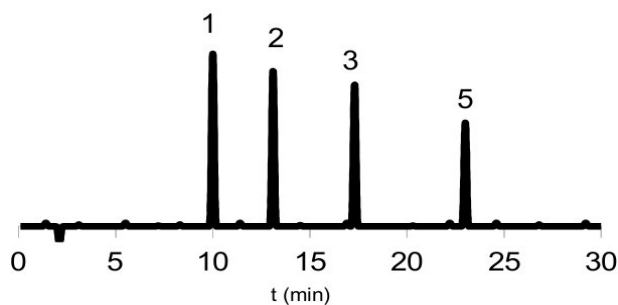
AppliChrom OTU Amino columns for sugar-HPLC:

Analysis of mono- and disaccharides, low molecular weight oligosaccharides in ACN/H₂O – alternative selectivity and different eluent to AppliChrom SugarSep-X series.

AppliChrom OTU DioHILIC columns for sugar-HPLC:

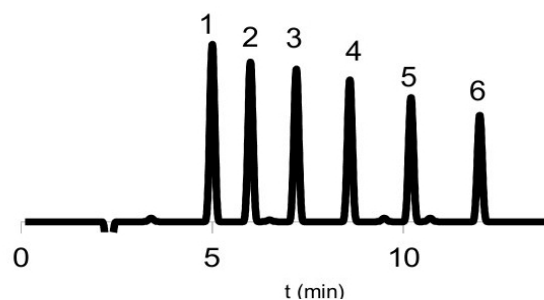
Analysis of mono- and disaccharides, of low molecular weight oligosaccharides in ACN/H₂O – alternative selectivity to AppliChrom OTU Amino columns.

Analysis of low molecular weight sugars & oligosaccharides



AppliChrom® ABOA Amino

250x4,6mm
0.5ml/min ACN/H₂O 75/25
25°C
RI-detection, (alternative ELSD)
20 μ l
Peaks in order of elution [min]
1. Fructose
2. Glucose
3. Sucrose
4. Maltose



AppliChrom® ABOA Amino

250x4,6mm
0.5ml/min ACN/H₂O 55/45
27°C
1ml/min
RI-detection, (alternative ELSD)
20 μ l
Peaks in order of elution [min]
1. Maltose
2. Maltotriose
3. Maltotetraose
4. Maltopentose
5. Maltohexose
6. Maltoheptose

GPC/SEC-methods for saccharides

AppliChrom GPC columns for water soluble samples:

AppliChrom ABOA SuperOH-P Series: polymeric polar aqueous GPC/SEC columns for oligomeric polymeric sugars resp. Polysaccharides. Range of molecular weight 100Da->20Mio Da. Applications: Molecular weight analysis of oligomeric and polymeric saccharides, saccharidderivatives, starches, starch degradation products, starch derivatives,

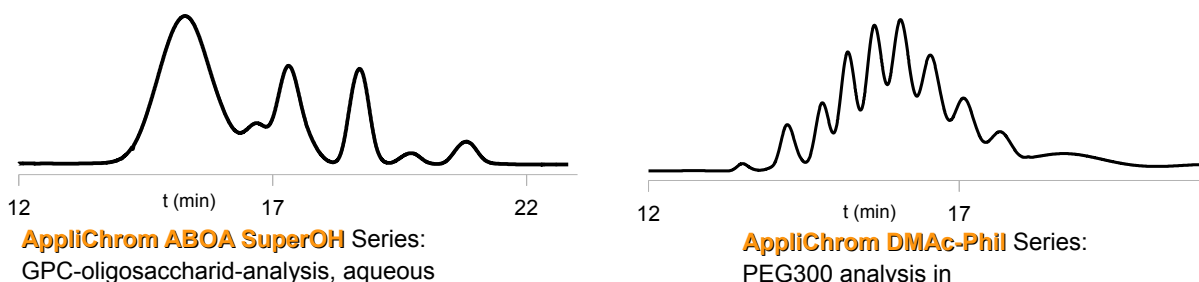
pectins, pullulan, alginat, dextran, dextransulfat, heparin, PEO/PEG,... - measurements in water.

AppliChrom GPC columns for DMSO soluble samples:

AppliChrom ABOA DMSO-Phil-P Series: polymeric based DMSO matched GPC high resolution GPC media for the molecular weight range of 100Da up to > 20Mio. Applications: high molecular weight starches, lignins, humic substances, medium and high polar technical polymers (PNIPA et al.) - measurements in DMSO.

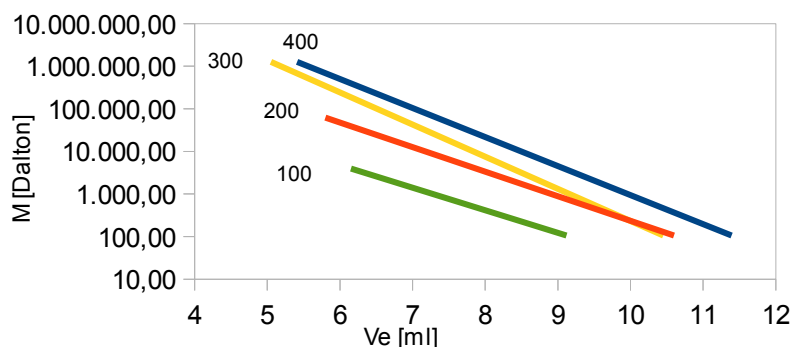
GPC/SEC-methods for saccharides:

GPC-analysis of a polysaccharid-degradation product & HPLC analysis with GPC column



Pore Sizes:

Pore sizes for various molecular weight ranges are available:



Measurement ranges of selected **AppliChrom ABOA SuperOH** GPC/SEC-columns, 300x8mm in water (PEG/PEO Standards): Porosities: 100, 200, 300, 400

AppliChrom capacity:

C₁₈, C₈, C₄, Phenyl,... HPLC-columns, C₈, C₁₈ SPE cartridges, desalting columns / cartridges for protein & DNA purification, OEM-production of chromatography media, MIP/molecularly imprinted polymers for chromatography, special polymeric based media e.g. sulfo-hydrazines for spe-sampleenrichment, applicationsupport (www.applichrom.de; www.hplc-sec.com). Please feel free to ask for more information at info@applichrom.de.

Oranienburg – origin, development and progress in chromatography:

AppliChrom produces and researches in Oranienburg, which also happens to be the site of the discovery of chromatography. An early form of paper chromatography was invented and described by Prof. Dr. F.F. Runge in 1850 in Oranienburg, Germany. He was most famous for his works "To colour chemistry, pattern pictures for friends of the beauty and for the use for draftsmen, painters, decorators and printers." (1850. Original title: *Zur Farbenchemie. Musterbilder für Freunde des Schönen und zum Gebrauch für Zeichner, Maler, Verzierer und Zeugdrucker. I. Lieferung. Dargestellt durch chemische Wechselwirkung von Dr. F.F. Runge*) and "The creative impulse of the substances illustrated in self-grown pictures" (1855. Original title: *Der Bildungstrieb der Stoffe, veranschaulicht in selbständig gewachsenen Bildern*). Encouraged by the history of chromatography in Oranienburg, AppliChrom develops and produces high quality innovative chromatography products and applications for the present and future needs of our customers. Our continuous growth in demand allows for increased investments into new capacities for further technological developments. What are your needs – please feel free to contact us continuous - info@applichrom.de.

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