

# Thermo Scientific AppsLab Library of Analytical Applications

Find Your Chromatography and MS Applications

## Product Spotlight

The Thermo Scientific™ AppsLab Library of Analytical Applications is a web-portal which gives you access to our comprehensive chromatography application expertise. It's a free of charge online repository that allows you to access the entire breadth of Thermo Scientific applications and which is constantly updated with newly released applications. Whether you need to implement validated methods or optimize your separation, whether you use Thermo Scientific™ Chromeleon CDS™ software or not, the AppsLab Library makes our global application expertise accessible to you – online and downloadable.

### Cross-technique application expertise in a single online location



The AppsLab Library increases productivity by letting you access LC, IC, GC, LC-MS, and GC-MS application notes in one location and providing download of one-click workflows, immediately ready to run with Chromeleon CDS.

Start using today at [www.thermofisher.com/AppsLab](http://www.thermofisher.com/AppsLab).



# Thermo Scientific AppsLab Library of Analytical Applications

## Find Your Chromatography Application

A

Find methods for your needs

B

**Latest Methods**

- Fast and direct analysis of multi-component vaccine adjuvant AbISCO-100 by HPLC-CAD**  
Instrument Type: HPLC-CAD
- AU176: Preparation of Peptide N-Glycosidase F Digests for HPAE-PAD Analysis**  
Instrument Type: IC
- AN71: Determination of Polyphosphates Using Ion Chromatography with Suppressed Conductivity Detection**  
Instrument Type: IC
- AU 175: Determination of Organic Acids and Inorganic Anions in Lithium-Containing Boric Acid-Treated Nuclear Power Plant Waters**  
Instrument Type: IC

The overview page is the starting point of the AppsLab Library and provides direct access to:

- (A) Google type search that allows you to find an application. Simply enter a keyword, such as a compound, matrix, instrument type or market.
- (B) The four most recently added applications.

Click the application title or image and immediately review the application.

Displaying 1-5 of 5 results for "EPA 300.1" Items per page: 5

Sort by: **Date Added** | **Descending**

- AU198: Improved Determination of Trace Concentrations of Oxalides and Bromide in Drinking Water Using a Hydroxide-Selective Column** ★★★★★ (1)  
Instrument Type: IC  
This study demonstrates the Thermo Scientific Dionex IonPac AS27 anion-exchange column for determination of trace concentrations of chlorite, bromate, chlorate, and bromide in drinking water samples. The Dionex IonPac AS27 offers several key advantages over the Dionex AS18 column, including the ability to determine trace bromate in the presence of the EDA preservative, good resolution of dichloroacetate (DCA, a surrogate anion) from potentially interfering matrix anions, and improved resolution between bromate and chlorite.
- AN 549: Determination of Chlorite, Bromate, Bromide, and Chlorate in Drinking Water by Ion Chromatography with an On-Line-Generated Postcolumn Reagent.**  
Instrument Type: IC  
This application note describes an improved ion chromatography (IC) method for bromide at low concentration levels in reagent water, purified water, and is technically equivalent to U.S. EPA Method 521.0. The oxalide anions chlorite separated on a Thermo Scientific Dionex IonPac AS9 HC column and measured in EPA Method 300.1, followed by postcolumn reaction (PCR) to anion.
- TN 132: Determination of Inorganic Anions in Municipal Wastewater Analysis According to EPA Method 300.1**  
Instrument Type: IC  
Anion determinations in municipal waste water samples using EPA Method 300.1 on an integrated IC system with a Thermo Scientific Dionex IonPac AS22 anion-exchange column to separate and quantify inorganic anions with manually prepared carbonate/bicarbonate eluents on a Thermo Scientific Dionex IC5 1250 or a Thermo Scientific Dionex IC5 5000 IC system. This method provides an economical way to meet EPA Method 300.1 (A) regulatory testing requirements.
- Determination of Oxalides and Bromide in Drinking Water According to EPA Method 300.1** ★★★★★ (2)  
Instrument Type: IC  
Determination of oxalides and bromide in drinking water samples using EPA Method 300.1 on a Thermo Scientific Dionex IC 5000 Reagent-Free Ion Chromatography (RFIC) system. The anions were separated with a Thermo Scientific Dionex IonPac AS27 anion-exchange column using an electrolytically generated gradient KCl eluent.

Searching retrieves a list with all applications matching the search parameters. To review any application for more detail, click the application title or image.

# Thermo Scientific AppsLab Library of Analytical Applications

## Find Your Chromatography Application

▼ Instrument Type

IC

▼ Market

Environmental

Water Analysis

▼ Has eWorkflow

Yes

No

▼ Matrix

Drinking water

Drinking Water (Spiked)

municipal wastewater

Water

▼ Run Time Length

From:  to:

▼ Compound

Name

Bromate

Bromide

Chlorate

Chloride

Chlorite [More...](#)

Class

Inorganic Anion

Organic Acid

Organic Anion

Oxhalide

Surrogate

▼ Date Added

From:  to:

Fine tune your application search. Filter application search results, for example on a compound name or the availability of an eWorkflow, to narrow down the list of applications.

Find methods for your needs

enter compound, matrix or instrument type

### Determination of Oxhalides and Bromide in Drinking Water According to EPA Method 306.1 ★★★★★ (2)

Response [a.u.]

Time [min]

CD.1

Compound Number	Compound Name	Compound Class	Retention Time [min]
1	Chlorite	Oxhalide	6.50
2	Bromate	Oxhalide	9.79
3	DCA	Surrogate	13.90
4	Chlorate	Oxhalide	16.70
5	Bromide	Inorganic Anion	18.50

**Description**

Determination of oxhalides and bromide in drinking water samples using EPA Method 306.1 on a Thermo Scientific Dionex IC-5000 Reagent Free Ion Chromatography (RFIC) system. The anions were separated with a Thermo Scientific Dionex IonPac AS27 anion-exchange column using an electrolytically generated gradient KCl eluent.

**Market:** Environmental Water Analysis

**Keywords:** Bromate, Bromide, Chlorate, Chlorite, Disinfection Byproduct, Drinking Water, Environmental, EPA Method 306.1, Ion Chromatography, Water analysis, IonPac AS27

**Matrix:** Drinking Water (Spiked)

**Status:** Proof of Concept

Updated on 12/02/2024

For Research Use Only. Not for use in diagnostic procedures.

**Tags**

Bromate Bromide Chlorate Chlorite Disinfection Byproduct Drinking Water Environmental EPA Method 306.1 Ion Chromatography Inorganic Anion IonPac AS27 Oxhalide Water analysis

The application view gives you instant access to complete information about the application. In addition, just one click allows you to directly download the Chromeleon eWorkflow for immediate execution of the application in Chromeleon CDS. All application details can be viewed in the different tabs at the bottom of the application view and printed into an Adobe® Acrobat® PDF document.

# Thermo Scientific AppsLab Library of Analytical Applications

## Find Your Chromatography Application

Compounds	Method	System	Downloads	Comments
<b>Instrument</b>				
Instrument type	IC			
Manufacturer	Thermo Fisher Scientific			
System	Dionex ICS 5000+			
IC Pump Model	ICS 5000 DP			
Autosampler Model	AS AP			
Column & Detector	DC			
Component Model				
Detector Type	ED			
<b>Columns</b>				
Manufacturer	Thermo Fisher Scientific	Manufacturer	Thermo Fisher Scientific	
Brand	Thermo Scientific Dionex	Brand	Thermo Scientific Dionex	
Model	IonPac AS27	Model	IonPac AS27	
Diameter	4 mm	Diameter	4 mm	
Length	50 mm	Length	232 mm	
Particle Size	6.5 µm	Particle Size	6.5 µm	
Stationary Phase	Anion Exchanger	Stationary Phase	Anion Exchanger	
Part Number	088418	Part Number	088417	
URL	IonPac AS27	URL	IonPac AS27	
<b>Consumables</b>				
Electrolytic Device				

The system section lists all hardware, columns and consumables used for this application. Easily create a list of part numbers for columns and consumables.



Compounds	Method	System	Downloads	Comments
<b>EPA300.1.pdf</b>				
EPA method 300.1				407 kb
<b>AU 198 - IC - Oxohalides - Bromide - Drinking - Water.pdf</b>				
Application Update 198				1375 kb
<b>AS27 - EPA Method 300.1 Templates.ewf</b>				
eWorkflow EPA 300.1 on Thermo Scientific Dionex IonPac AS27				3704 kb
<b>TN-71663-Chromleon-CDS-Inorganic-Anions-Drinking-Water-TN71663-EN.pdf</b>				
Technical Note 71663 - Chromleon workflow for inorganic anions in drinking water				0 kb
<b>Web Links</b>				
No information available				

Directly download files related to the application, for example ready to run Chromeleon eWorkflows, application note PDF files or descriptions of regulatory methods.

**Comments**

**good application**  
By Steve W. on 11/18/2015  
nice stuff  
Reply by Sue B. on 3/22/2016  
nice comment - couldn't agree more  
Reply by Sue B. on 3/22/2016  
Certainly a nice piece of work

★★★★☆ **good application**  
By Susanne K. on 11/5/2015

★★★★☆ **nice application**  
By Steve W. on 10/13/2015  
I was able to easily run this application in my lab.

Share

Interact with the experts, ask questions and share your experiences, applications and searches with the interactivity tools.

Find out more at [thermofisher.com/AppsLab](http://thermofisher.com/AppsLab)

**ThermoFisher**  
SCIENTIFIC

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