## thermo scientific



Thermo Scientific<sup>™</sup> Dionex<sup>™</sup> IC Standards and Reagents

# Easy and convenient IC reagent and standard preparation

### Benefits

- Reduce reagent and standard preparation errors
- Improve day-to-day reproducibility
- Reduce downtime due to bad reagents

#### **Keywords**

Ion chromatography standards, anion standards, cation standards, oxyhalide standards, eluent concentrates, haloacetic acid standards, suppressor regenerant, ion-pairing reagents, transition metal reagents, chelation chromatography reagents We offer a complete line of Thermo Scientific<sup>™</sup> Dionex<sup>™</sup> standards, reagents, and chemicals for ion chromatography applications. To simplify your chromatography, we have developed all the reagents and standards you need, including anion and cation standards, eluent concentrates, and suppressor regenerant concentrates. We also offer high-purity chemicals and reagents for transition metal analysis, including ultrapure chelation chromatography reagents for trace and ultratrace transition and lanthanide metal analysis.

- Only high-purity, reagent-grade chemicals and water (18 MΩ-cm) that have been checked for ionic contamination are used.
- A Certificate of Analysis is provided with every standard and chelation chromatography reagent.
- All standards are NIST\* traceable.
- Minimize time-consuming reagent and standard validation.
- Keep your system operating at peak performance.
- Your satisfaction is guaranteed; all Thermo Scientific Dionex reagents and standards carry a 90-day warranty.

\*National Institute of Standards and Technology



**Ordering information** To order in the US, visit thermofisher.com, call (800) 532-4752, or contact the nearest Thermo Fisher Scientific office. Outside the US, order through your local Thermo Fisher Scientific office or distributor. Refer to the following part numbers.

Anion standards		Volume	Part number
Dionex Nine Anion Stand	lard		
Contains the following analytes:			
Fluoride	20 mg/L		
Chloride	30 mg/L		
Nitrite	100 mg/L		
Bromide	100 mg/L	50 mL	303173
Nitrate	100 mg/L		
Bromate	100 mg/L		
Chlorate	100 mg/L		
Phosphate	150 mg/L		
Sulfate	150 mg/L		
Dionex Seven Anion Ret	ention Time Standard		
Contains the following analy	/tes:		
Fluoride	1 mg/L		
Chloride	12 mg/L		
Nitrite	8 mg/L	50 mL	088957
Bromide	18 mg/L		
Nitrate	18 mg/L		
Phosphate	13 mg/L		
Sulfate	20 mg/L		
Dionex Seven Anion Ret	ention Time Standard concentrate		
Contains the following analytes:			
Fluoride	100 mg/L		302511
Chloride	1200 mg/L		
Nitrite	800 mg/L	50 mL	
Bromide	1800 mg/L		
Nitrate	1800 mg/L		
Phosphate	1300 mg/L		
Sulfate	2000 mg/L		
Dionex Combined Seven	Anion Standard I		
Contains the following analy	/tes:		
Fluoride	20 mg/L	50 mL	
Chloride	30 mg/L		
Nitrite	100 mg/L		056933
Bromide	100 mg/L		
Nitrate	100 mg/L		
Phosphate	150 mg/L		
Sulfate	150 mg/L		

Anion standards (d	continued)	Volume	Part number
Dionex Combined Seven Anion Standard II			
Contains the followin	g analytes:		
Fluoride	20 mg/L		
Chloride	100 mg/L		
Nitrite	100 mg/L	50 mL	057590
Bromide	100 mg/L		
Nitrate	100 mg/L		
Phosphate	200 mg/L		
Sulfate	100 mg/L		
Dionex Combined	Five Anion Standard		037157
Contains the followin	g analytes:		
Fluoride	20 mg/L		
Chloride	30 mg/L	100 mL	
Nitrate	100 mg/L		
Phosphate	150 mg/L		
Sulfate	150 mg/L		
Dionex Fluoride Sta	andard, 1000 mg/L	100 mL	037158
Dionex Chlorite Sta	ndard, 1000 mg/L	125 mL	303167
Dionex Bromate St	andard, 1000 mg/L	125 mL	303168
Dionex Chloride Sta	andard, 1000 mg/L	100 mL	037159
Dionex Nitrite Stan	dard, 1000 mg/L	125 mL	303169
Dionex Chlorate Sta	andard, 1000 mg/L	125 mL	303170
Dionex Nitrate Star	ndard, 1000 mg/L	100 mL	056497
Dionex Phosphate	Standard, 1000 mg/L	125 mL	303172
Dionex Sulfate Star	ndard, 1000 mg/L	100 mL	037160

Cation standards		Volume	Part number
Dionex Six Cation Retention Time Standard			
Contains the following	g analytes:		088964
Lithium	2 mg/L		
Sodium	9 mg/L	50 mL	
Ammonium	3 mg/L	50 ML	
Potassium	21 mg/L		
Magnesium	9 mg/L		
Calcium	17 mg/L		
Dionex Six Cation	Retention Time Standard, 100x concentrate		
Contains the following	g analytes:		088969
Lithium	200 mg/L		
Sodium	900 mg/L	50 mL	
Ammonium	300 mg/L	50 ML	
Potassium	2100 mg/L	-	
Magnesium	900 mg/L		
Calcium	1700 mg/L		

Cation standards (continu	ued)	Volume	Part number
Dionex Combined Six Cation Standard I			
Contains the following analyt	'es:		040407
Lithium	50 mg/L		
Sodium	200 mg/L	50 mL	
Ammonium	400 mg/L	50 ML	040187
Potassium	200 mg/L		
Magnesium	200 mg/L		
Calcium	1000 mg/L		
Dionex Combined Six Cat	tion Standard II		
Contains the following analyt	es:		046070
Lithium	50 mg/L		
Sodium	200 mg/L	50 ml	
Ammonium	250 mg/L	- 50 mL - -	
Potassium	500 mg/L		
Magnesium	250 mg/L		
Calcium	500 mg/L		

MS standard concentrates	Volume	Part number
Designed for the quantification of perchlorate at low parts-per-trillion using mass spectrometric detection. Contains stable-labeled perchlorate (1 mg/L).		
Dionex Perchlorate-ISTD <sup>18</sup> O Internal Standard for Perchlorate, 1 mg/L	10 mL	062923

Haloacetic acid internal standards	Volume	Part number
Ready to use internal standards for haloacetic acid analysis using electrospray-mass spectrometric detection. Stable-labeled interna standards prepared in MTBE (methyl tertiary-butyl ether), 1 mL ampule plus empty vial		
Dionex Monochloroacetic Acid (MCAA-2-13C), 1000 mg/L	1 mL	069406
Dionex Monobromoacetic Acid (MBAA-1-13C), 1000 mg/L	1 mL	069407
Dionex Dichloroacetic Acid (DCAA-2-13C), 1000 mg/L	1 mL	069408
Dionex Trichloroacetic Acid (TCAA-2-13C), 1000 mg/L	1 mL	069409

Eluent concentrates/chemicals	Volume	Part number
<b>Dionex AS29 Eluent Concentrate (100x)</b> 0.45 M Na <sub>2</sub> CO <sub>3</sub> /0.20 M NaHCO <sub>3</sub>	250 mL	302952
<b>Dionex AS23 Eluent Concentrate (100x)</b> 0.45 M Na <sub>2</sub> CO <sub>3</sub> /0.08 M NaHCO <sub>3</sub>	250 mL	064161
<b>Dionex AS22 Eluent Concentrate (100x)</b> 0.45 M Na <sub>2</sub> CO <sub>3</sub> /0.14 M NaHCO <sub>3</sub>	250 mL	063965
<b>Dionex AS14A Eluent Concentrate (100x)</b> 0.80 M Na <sub>2</sub> CO <sub>3</sub> /0.10 M NaHCO <sub>3</sub>	250 mL	056937
<b>Dionex AS14A Eluent Concentrate (20x)</b> 0.16 M Na <sub>2</sub> CO <sub>3</sub> /0.02 M NaHCO <sub>3</sub>	100 mL 4 × 100 mL	057560 057557
Dionex AS14 Eluent Concentrate (100x) 0.35 M Na <sub>2</sub> CO <sub>3</sub> /0.10 M NaHCO <sub>3</sub>	250 mL	053560
<b>Dionex AS4A, AS4A-SC, and AS9-SC Eluent Concentrate (100x)</b> 0.18 M Na <sub>2</sub> CO <sub>3</sub> /0.17 M NaHCO <sub>3</sub>	250 mL	039513

Eluent concentrates/chemicals (continued)	Volume	Part number
Dionex AS3/AS4 Eluent Concentrate (100x) 0.22 M Na <sub>2</sub> CO <sub>3</sub> /0.28 M NaHCO <sub>3</sub>	500 mL	037161
Dionex Sodium Carbonate Concentrate 0.5 M Na <sub>2</sub> CO <sub>3</sub>	500 mL	037162
Dionex Sodium Bicarbonate Concentrate 0.5 M NaHCO <sub>3</sub>	500 mL	037163
Dionex CS12A Eluent Concentrate (20x) 0.4 M MSA	100 mL 4 × 100 mL	057562 057558
<b>Dionex DL-2,3-Diaminopropionic Acid Monohydrochloride (DAP-HCI)</b> For use with Dionex IonPac CS3, CS10, and CS11 columns	5 g	039670

Pressurized bottle and AutoRegen reagents for CRS suppressors	Volume	Part number
<b>Dionex Anion AutoRegen Concentrate (10x)</b> 0.25 N H <sub>2</sub> SO <sub>4</sub>	50 mL	039601
<b>Dionex Anion Regenerant Solution (20x)</b> 0.5 N H <sub>2</sub> SO <sub>4</sub>	200 mL 4 × 200 mL	039203 037164
Dionex Cation Regenerant Solution (ready to use) 0.1 N TBAOH	500 mL	039602

Displacement chemical regeneration reagents for CRS suppressors	Volume	Part number
<b>Dionex Anion Regenerant Concentrate (20x)</b>	75 mL	057559
2.0 N H <sub>2</sub> SO <sub>4</sub>	4 × 75 mL	057555
Dionex Cation Regenerant Solution (20x)	100 mL	057561
2.06 M TBAOH	4 × 100 mL	057556
Dionex Cation Regenerant Solution (ready to use) 0.1 N TBAOH	500 mL	039602

Ion pairing reagents	Volume	Part number
Dionex IonSep <sup>™</sup> Reagent (MPIC <sup>™</sup> -CR1) 0.1 M Hexanesulfonic Acid	500 mL	035361
Dionex IonSep Reagent (MPIC-CR2) 0.1 M Octanesulfonic Acid	500 mL	035362
Dionex IonSep Reagent (MPIC-AR1) 0.1 M Tetrabutylammonium Hydroxide (TBAOH)	500 mL	035360
Dionex IonSep Reagent (MPIC-AR2) 0.1 M Tetrapropylammonium Hydroxide (TPAOH)	500 mL	035363

Reagents for transition metals	Volume	Part number
Dionex MetPac <sup>™</sup> PDCA Eluent Concentrate (5x)	1000 mL	046088
Dionex MetPac Oxalic Acid Eluent Concentrate (10x)	500 mL	046091
Dionex MetPac PAR Postcolumn Diluent (ready to use)	1000 mL	046094

Transition metal chemicals	Quantity	Part number
Dionex Pyridine-2,6-Dicarboxylic Acid (PDCA)	20 g	039671
Dionex 4-2(-Pyridylazo) Resorcinol (PAR)	5 g	039672

Chelation chromatography reagents	Volume	Part number
These reagents are specifically designed to be used with the Dionex IC/ICP Int and lanthanide metals at trace and ultratrace levels. A Certificate of Analysis is		ination of transition
Dionex 2.0 M Nitric Acid	1 L 6 × 1 L	033442 033443
Dionex 2.0 M Ammonium Acetate	1 L 6 × 1 L	033440 033441
Dionex 0.1 M Ammonium Nitrate	1 L 6 × 1 L	033444 033445

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