

Acclaim™ Application Specific Phases

Thermo Scientific Acclaim™ speciality phases are based on novel and unique chemistries and combine superior resolution with ease of use.

Acclaim Phase	Particle Size (µm)	Pore Size (Å)	pH Range	Typical Applications
Organic Acid (OA)	3, 5	120	2 - 8	Hydrophilic, aliphatic and aromatic organic acids
Surfactant	3, 5	120	2.5 - 7.5	Anionic, cationic, non-ionic and amphoteric surfactants
Explosives E1	5	120	3 - 7	Nitroaromatic and nitramine explosives
Explosives E2	2.2, 3, 5	120	2.5 - 8	
Carbamate	3, 5	120	2 - 8	Carbamate pesticides
Carbonyl	2.2	120	2.5 - 8	DNPH derivatives of aldehydes and ketones

Acclaim Organic Acid (OA) is a reversed-phase column designed for high efficiency, high throughput organic acid analysis. This phase is recommended for determining small hydrophilic organic acids, C1 to C7 aliphatic acids and hydrophilic aromatic acids. It is also valuable for the analysis and quality assurance of food and beverage products, pharmaceutical preparations, plating baths and manufacturing chemicals. Acclaim OA is compatible with 100% aqueous eluents. Figure 19 shows the separation of a range of organic acids found in soft drink.

Acclaim Surfactant is a silica-based column for separating a wide variety of surfactants, including anionic (alkylbenzene sulphonates, alkyl sulphates, alkylether sulphates), cationic (alkyl quaternary ammonium salts, benzylalkylammonium salts, pyridinium salts and quaternary imidazolium compounds), non-ionic (polyethylene glycols) and amphoteric surfactants. The phase is resistant to dewetting under highly aqueous conditions and provides excellent resolution between strongly hydrophilic compounds, such as isomers of xylene sulphonate. Figure 20 shows the separation of a mixture of surfactants.

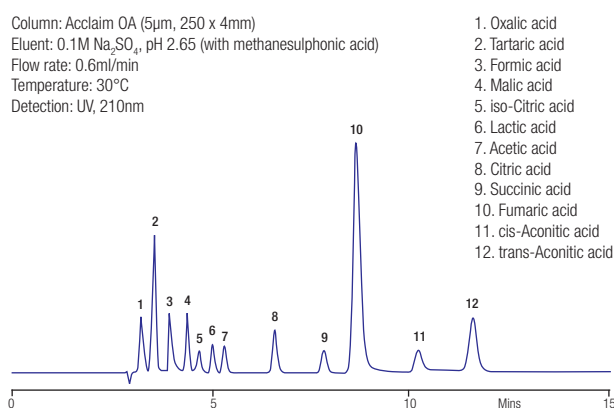


Figure 19. Analysis of organic acids on Acclaim OA

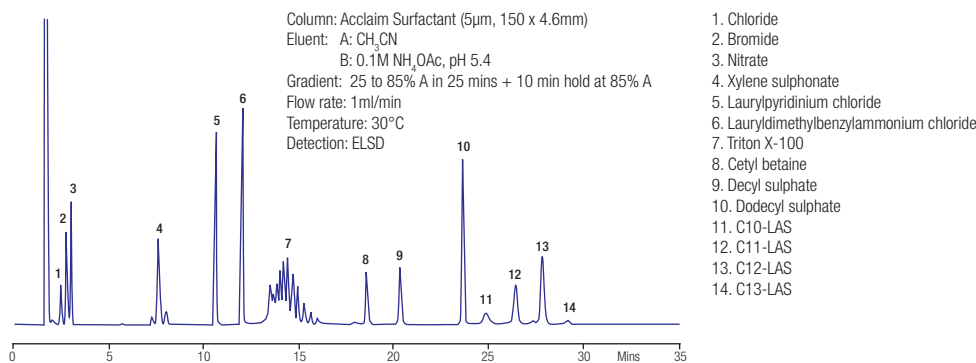


Figure 20. Separation of mixture of surfactants

Acclaim Explosives E1 and E2 columns are specifically designed to resolve all 14 explosives listed in EPA Method 8330 (nitroaromatics and nitroamines). The Acclaim Explosives E1 column is recommended for use as direct replacement for C18 columns for the primary analysis. The Acclaim Explosives E2 offers complementary selectivity and may be used as either a primary or a confirmatory column.

Acclaim Carbamate columns are designed for baseline separation of carbamate pesticides in drinking water and raw surface water, as specified in US EPA Method 531.2. It is used in conjunction with post-column derivatization and fluorescence detection or LC-MS.

Acclaim Carbonyl is a reversed-phase column designed specifically for separating DNPH derivatives of aldehydes and ketones, regulated by various official methods. It has a particle size of 2.2µm, suitable for high efficiency UHPLC performance.

Please see page 238 for ordering information for Acclaim columns.

Ordering Information – Acclaim™

Please contact Hichrom for ordering information for 2.2µm particle size columns and column dimensions not listed below.

Acclaim Reversed-Phase and HILIC Columns

Acclaim Phase	Column Dimensions ¹ (mm)				Guard Cartridges ²
3µm	50 x 2.1	100 x 2.1	150 x 2.1	250 x 2.1	10 x 2.1mm (2/pk)
120 C18	059128	059129	059130	076187	-
120 C8	059122	059123	059124	076185	-
C30	-	-	075725	-	075722
Phenyl-1	078016	078015	071971	078014	071975
PA (PolarAdvantage)	063174	061316	061317	076215	-
PA2 (PolarAdvantage II)	077999	077998	063187	077997	-
HILIC-10	-	-	074259	-	-
5µm					
120 C18	059142	059143	059144	059145	069689
120 C8	059134	059135	059136	059137	069688

Acclaim Phase	Column Dimensions ¹ (mm)				Guard Cartridges ²
3µm	50 x 4.6	100 x 4.6	150 x 4.6	250 x 4.6	10 x 4.6mm (2/pk)
120 C18	059131	059132	059133	-	-
120 C8	059125	059126	059127	-	-
C30	-	-	075723	-	075720
Phenyl-1	078018	078017	071969	-	071973
PA (PolarAdvantage)	-	076216	061318	-	-
PA2 (PolarAdvantage II)	063189	078001	063191	-	-
HILIC-10	-	-	074257	-	-
5µm					
120 C18	059146	059147	059148	059149	069695
120 C8	059138	059139	059140	059141	069696
C30	-	-	075719	075718	-
PA (PolarAdvantage)	061319	-	061320	061321	069698
PA2 (PolarAdvantage II)	-	-	063197	063199	069699

¹ Other column dimensions available

² Use with guard cartridge holder V-2, p/n 069580

and column coupler V-2 p/n 074188

Acclaim Mixed-Mode Phases

Phase	Column Dimensions ¹ (mm)				
3µm	50 x 2.1	100 x 2.1	150 x 2.1	50 x 3.0	150 x 3.0
Mixed-Mode WAX-1	-	-	070089	071908	070088
Mixed-Mode WCX-1	-	-	070093	071910	070092
Mixed-Mode HILIC-1	-	-	070091	071912	070090
Trinity P1	075565	071389	075564	071388	075563

Phase	Column Dimensions ¹ (mm)			Guard Cartridges ²	Guard Cartridges ²
5µm	150 x 2.1	150 x 4.6	250 x 4.6	10 x 2.1mm (2/pk)	10 x 4.6mm (2/pk)
Mixed-Mode WAX-1	067084	064984	064985	069686	069704
Mixed-Mode WCX-1	068371	068353	068352	-	069705
Mixed-Mode HILIC-1	066847	066843	066844	069694	069706

Acclaim Speciality Phases³

Phase	Column Dimensions ¹ (mm)			
3µm	150 x 2.1	150 x 3.0	250 x 3.0	150 x 4.6
Organic Acid	070087	070086	-	-
Surfactant	070085	070084	-	-
Explosives E2	070083	070082	070081	-
Carbamate	072927	072926	-	072925

Phase	Column Dimensions ¹ (mm)			Guard Cartridges ²	Guard Cartridges ²
5µm	150 x 2.1	150 x 4.6	250 x 4.6	10 x 2.1mm (2/pk)	10 x 4.6mm (2/pk)
Organic Acid	-	062903 ⁴	062902 ⁴	-	069700
Surfactant	068123	063201	063203	069693	069701
Explosives E1	-	-	064305	-	069702
Explosives E2	-	-	064309	-	069703
Carbamate	-	-	072924	072930	072928

¹ Other dimensions available

² Use with guard cartridge holder V-2, p/n 069580

and column coupler V-2 p/n 074188

³ Please enquire for ordering information for Acclaim Carbonyl columns

⁴ 4.0mm i.d.