Thermo Scientific Acclaim HPLC Columns

Optimal selectivity through innovative chemistry

- Novel and proprietary surface chemistries for diversified selectivities
- Ultrapure, porous, spherical silica
- High efficiencies
- Low silanol activity for good basic analyte peak shapes
- Reproducible and reliable manufacturing process

Thermo Scientific™ Acclaim™ columns are based on high-purity, porous silica particles, with advanced and innovative column bonding technologies. This provides complementary selectivity, high column efficiencies, and symmetrical peaks. Acclaim columns meet the high standards set by modern HPLC and LC-MS methods and are used in applications such as pharmaceutical, environmental, food and beverage, chemical, and consumer products. General reversed-phase, HILIC and Specialty phases are available. Acclaim RSLC columns, with a particle size of 2.2µm, are designed for use with UHPLC systems.

Reliability and Durability

Quality and reliability are essential to a successful analysis. The Acclaim columns are thoroughly tested individually, so that chromatographers can have full confidence in them. Manufacturing starts with an ultrapure silica substrate, using only carefully selected lots with narrow ranges of physical parameters. By design, the bonding processes are clean and repeatable with no unexpected changes in performance. Each batch of bonded silica receives a full suite of validation tests appropriate to its intended use. The bonded silica is packed in precision-polished 316 stainless steel hardware using highly reliable processes. Each packed column is tested to ensure the same great performance every time.

The quality assurance reports for silica lot validation and column performance explain the test protocols, list the specifications, and show the actual chromatograms.

Performance Indicators

Acclaim columns have been designed to meet the high quality standard needed in laboratories today. The innovative surface chemistries deliver exceptional peak efficiencies for a broad range of analytes. To ensure optimal performance, all Acclaim products are thoroughly characterized using a number of performance indicators, including surface coverage of the bonded phase, metal contamination, steric selectivity, column polarity, column hydrophobicity, and low silanol activity for bases. The specialty columns are also application-tested for their specific analysis, to ensure that each lot of bonded silica provides high-performance separations.

Reversed-phase Columns

Acclaim 120 C18: High-density, monolayer C18 reversed-phase columns for exceptional resolution in a variety of applications.

Acclaim 120 C8: High-density monolayer C8 reversed-phase column.

Acclaim Phenyl-1: A unique reversed-phase column for the superior separation of aromatic compounds with enhanced hydrolytic stability.

Acclaim C30: Designed to provide high shape selectivity for separation of hydrophobic structurally related isomers.

Acclaim PolarAdvantage: Sulfonamide-embedded column for separating a wide variety of analytes.

Acclaim PolarAdvantage II: Amide-embedded reversed-phase columns with enhanced hydrolytic stability.

Size-exclusion Columns

Acclaim SEC Columns: Polymeric columns designed for separating water soluble polymers and oligomers in the MW range of 100 to 1,000,000 Daltons.

Hydrophilic Interaction Columns

Acclaim HILIC-10: Designed for separating hydrophilic compounds

Acclaim Trinity P1 and P2 columns: Unique trimodal surface chemistry provides simultaneous reversed-phase, anion and cation exchange capability for unparalleled chromatographic performance and maximum flexibility in adjusting selectivity (see Specialty Columns).

Mixed-Mode Columns

Mixed-mode columns provide a unique, adjustable selectivity tool, using variation in pH, ionic strength, or organic modifier to influence the separation selectivity of acids, bases, zwitterions and neutral molecules.

Acclaim Mixed-Mode HILIC-1: Combines both reversed-phase and hydrophilic interaction liquid chromatography (HILIC) properties.

Acclaim Mixed-Mode WAX-1: High-density monolayer that incorporates both reversed-phase and weak anion exchange properties.

Acclaim Mixed-Mode WCX-1: Reversed-phase and cation exchange combined in a single column.