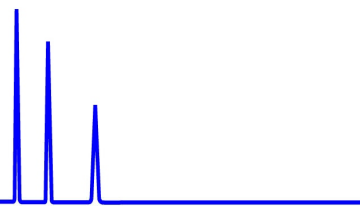




ZirChrom®

Technical Bulletin #172



... For Peak Performance

# ZirChrom®-PBD Outperforms Polymeric Columns

## ZirChrom®-PBD columns

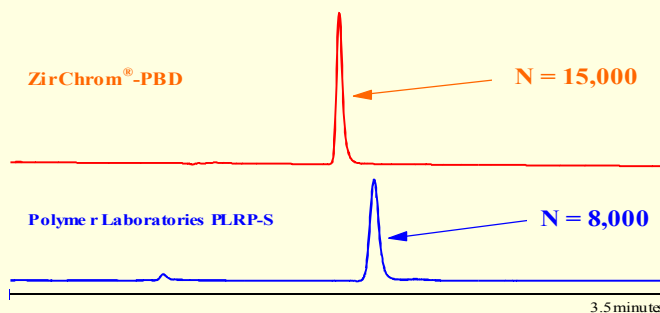
vs.

## Polymeric columns

ZirChrom®-PBD columns offer a superior reversed-phase alternative to polymeric columns. ZirChrom®-PBD columns possess all of the advantages of polymeric columns with none of the drawbacks. Like polymeric columns, ZirChrom®-PBD columns offer extreme chemical and thermal stability. Unlike polymeric columns, ZirChrom®-PBD columns possess superior efficiency, are highly reproducible (particularly for gradient elutions), exhibit selectivity similar to bonded phases for easier method development, and offer extraordinary solvent stability. Try a ZirChrom®-PBD column today! If you are not completely satisfied with its performance just return the column within ninety days for a full money back refund.

## ZirChrom® columns - Most Novel for 1998 by LC•GC

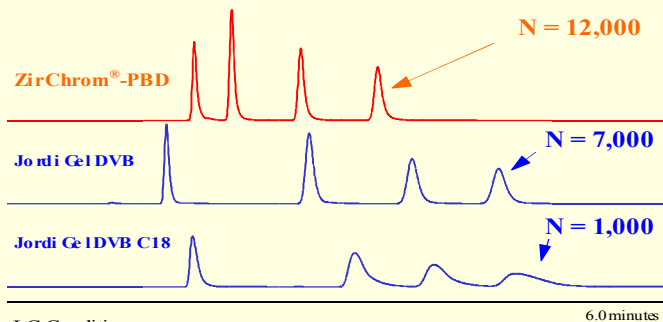
Figure 1. Comparison of ZirChrom®-PBD to Polymer Labs PLRP-S 100A using Polymer Labs reversed-phase test mix and test conditions.



LC Conditions

Columns (top to bottom), ZirChrom®-PBD, Polymer Laboratories PLRP-S 100A, 150 x 4.6 mm i.d.; Mobile Phase, 87.5/12.5 Acetonitrile/Water; Flow, 1.0 ml/min; Detector, 254 nm; Column Temperature = 30°C; Injection Volume, 0.5 µl; Solute: phenol.

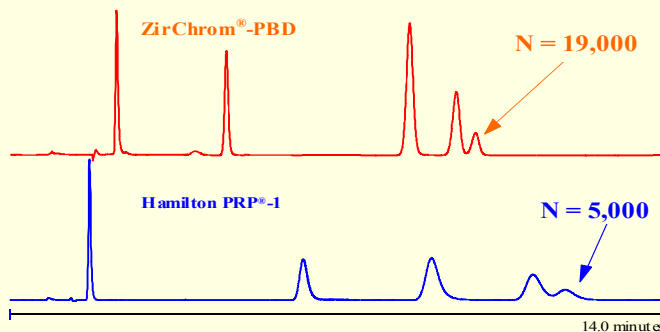
Figure 2. Comparison of ZirChrom®-PBD to Jordi Gel DVB 500A and DVB C18 500A using Jordi reversed-phase test mix and test conditions.



LC Conditions

Columns (top to bottom), ZirChrom®-PBD, Jordi Gel DVB, Jordi Gel DVB C18 500A, 150 x 4.6 mm i.d.; Mobile Phase, 10(10)/10(20)/20(30)/60(40) Methanol/Acetonitrile/Tetrahydrofuran/Water; Flow, 1.0 ml/min; Detector, 254 nm; Column Temperature = 50°C; Injection Volume, 2.0 µl; Solutes: uracil, ethylparaben, propylparaben, butylparaben.

Figure 3. Comparison of ZirChrom®-PBD to Hamilton PRP®-1 using ZirChrom®-PBD reversed-phase test mix and test conditions.



LC Conditions

Columns (top to bottom), ZirChrom®-PBD, Hamilton PRP®-1, 150 x 4.6 mm i.d., Mobile Phase, 15(50)/85(50) Acetonitrile/Water; Flow, 1.0 ml/min; Detector, 254 nm; Column Temperature = 30°C; Injection Volume, 5.0 µl; Solutes: resorcinol, benzonitrile, methyl benzoate, anisole, benzene.

