

# InertSearch™ for LC

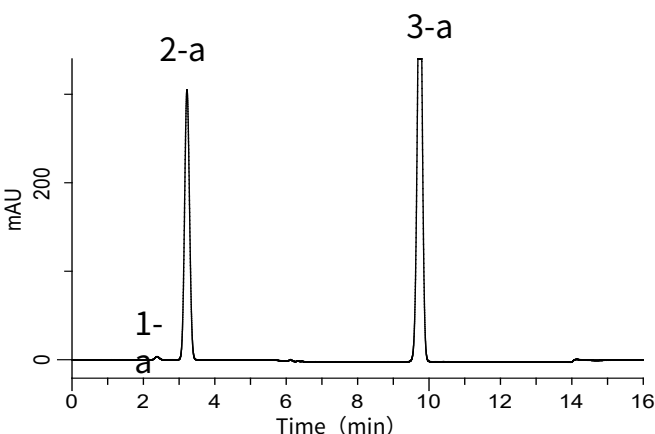
Inertsil® Applications

## Analysis of Telmisartan and Hydrochlorothiazide

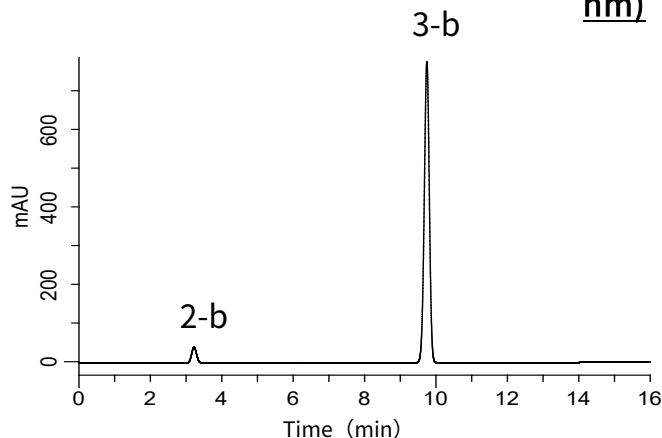
(Under the Condition of USP41-NF36, Telmisartan and Hydrochlorothiazide Tablets)

Data No. LB534-0812

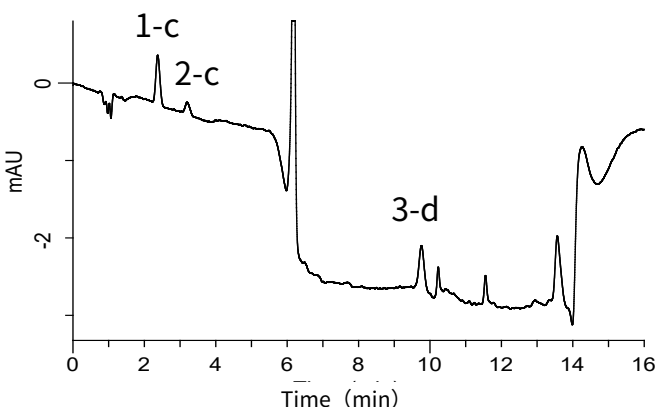
Standard solution A of Assay (UV 270 nm)



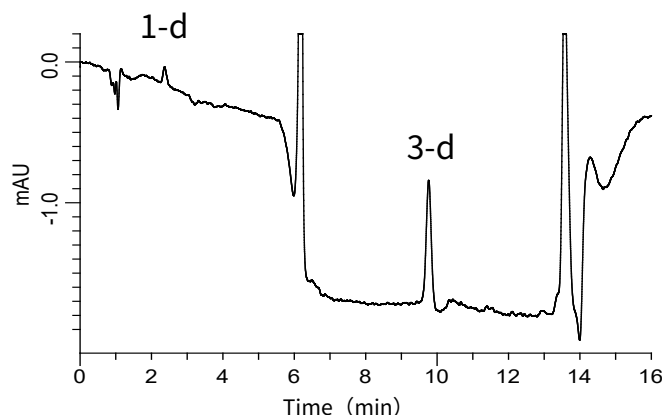
Standard solution A of Assay (UV 298 nm)



Sensitivity solution for Organic impurities (UV 270 nm)



Sensitivity solution for Organic impurities (UV 298 nm)



### Conditions

**System** : GL7700 HPLC system  
**Column** : InertSustain C8 (5  $\mu$ m, 125 x 4.0 mm I.D.)  
**Column Cat. No.** : 5020-16853  
**Eluent** : A) CH<sub>3</sub>CN /CH<sub>3</sub>OH = 50/50, (v/v)  
B) 2 g/L NH<sub>4</sub>H<sub>2</sub>PO<sub>4</sub> (pH 3.0, H<sub>3</sub>PO<sub>4</sub>)

| Time (min) | A (vol%) | B (vol%) |
|------------|----------|----------|
| 0          | 15       | 85       |
| 3.50       | 15       | 85       |
| 3.51       | 55       | 45       |
| 7.70       | 55       | 45       |
| 7.71       | 80       | 20       |
| 12.0       | 80       | 20       |
| 12.1       | 15       | 85       |
| 15.5       | 15       | 85       |

**Flow rate** : 1.2 mL/min  
**Col. Temp.** : 40 °C  
**Detection** : UV 270 nm or 298 nm  
**Injection Vol.** : 10  $\mu$ L

### Analyte:

- 4-Amino-6-chlorobenzene-1,3-disulfonamide  
0.5 mg/L (1-a) or 0.1 mg/L (1-c, 1-d)
- Hydrochlorothiazide  
100 mg/L (2-a, 2-b) or 0.1 mg/L (2-c, 2-d)
- Telmisartan  
320 mg/L (3-a, 3-b) or 0.32 mg/L (3-c, 3-d)

Resolution (1-a, 2-a) : 3.48 (> 2.0)

RSD of the peak area of 2-a (%) (n=6) : 0.14 (< 2.0)

RSD of the peak area of 3-b (%) (n=6) : 0.09 (< 2.0)

S/N for 1-c : 24.3 (> 3.0)

S/N for 2-c : 5.7 (> 3.0)

S/N for 3-d : 29.1 (> 3.0)

**GL Sciences**