

InertSearch™ for LC

Inertsil™ Applications

Analysis of Steviol glycosides

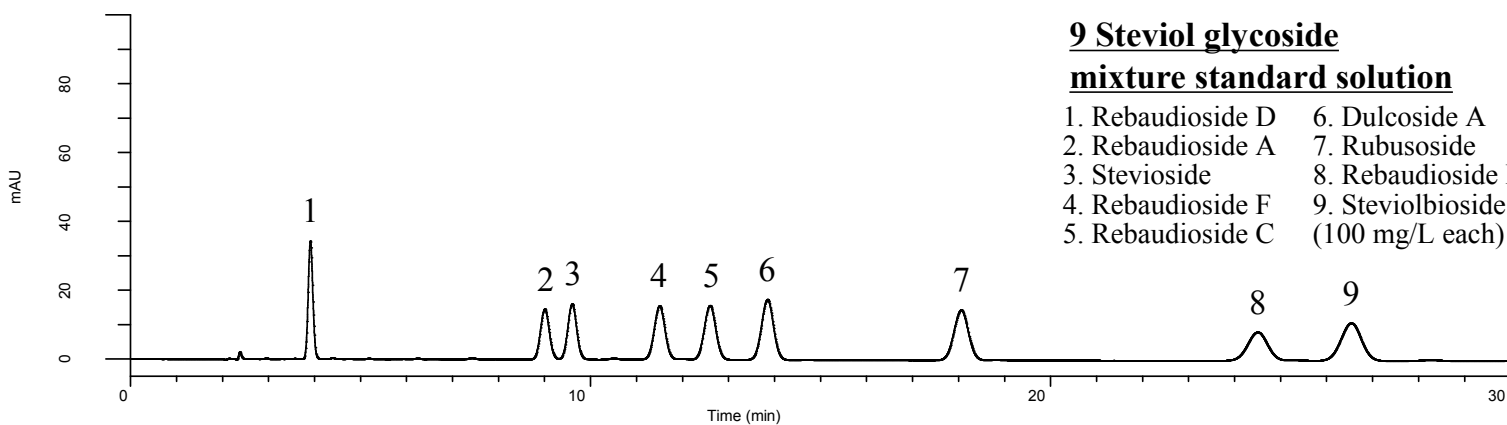
(Under the Condition of the JSFA-IX (Japanese Standards of Food Additives),
Steviol Glycosides)

Data No. LB568-0919

9 Steviol glycoside

mixture standard solution

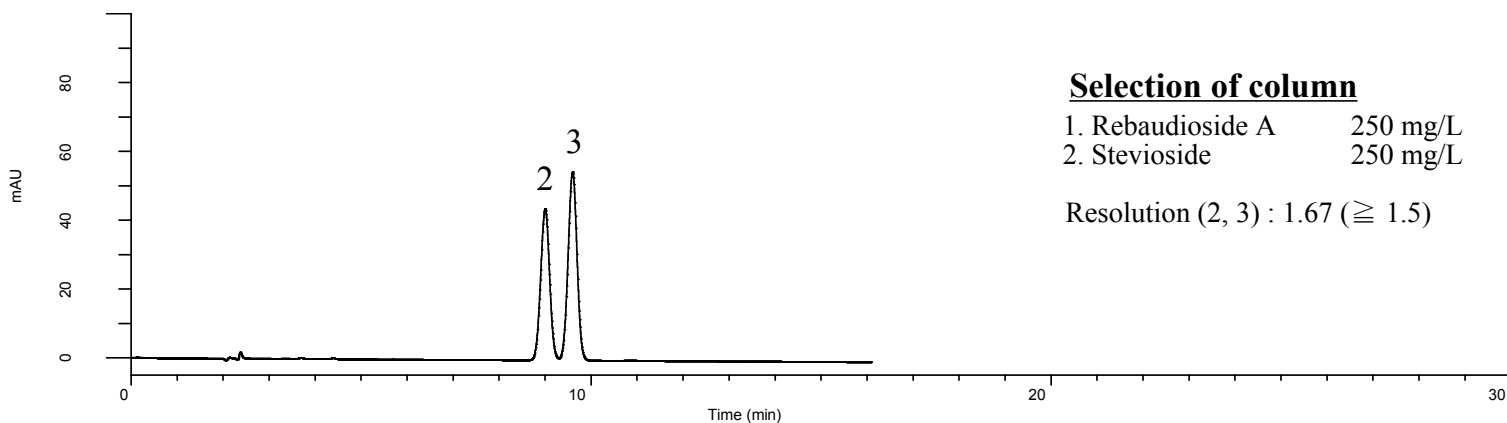
- | | |
|-------------------|-------------------|
| 1. Rebaudioside D | 6. Dulcoside A |
| 2. Rebaudioside A | 7. Rubusoside |
| 3. Stevioside | 8. Rebaudioside B |
| 4. Rebaudioside F | 9. Steviolbioside |
| 5. Rebaudioside C | (100 mg/L each) |



Selection of column

- | | |
|-------------------|----------|
| 1. Rebaudioside A | 250 mg/L |
| 2. Stevioside | 250 mg/L |

Resolution (2, 3) : 1.67 (≥ 1.5)



Conditions

- System** : GL7700 HPLC system
Column : InertSustain AQ-C18
(5 μ m, 250 x 4.6 mm I.D.)
Column Cat. No. : 5020-89731
Eluent : A) CH₃CN
B) 0.01 M Phosphate buffer in H₂O (pH 2.6)*
A/B = 8/17, v/v
Flow Rate : 1.0 mL/min
Col. Temp. : 40 °C
Detection : UV 210 nm (UV7751 UV Detector)
Injection Vol. : 10 μ L
Sample : Standard

Analyte:

1. Rebaudioside D
2. Rebaudioside A
3. Stevioside
4. Rebaudioside F
5. Rebaudioside C
6. Dulcoside A
7. Rubusoside
8. Rebaudioside B
9. Steviolbioside

*Dissolve 1.56 g of sodium dihydrogenphosphate dihydrate in 1000 mL of water (Solution A).

Dissolve 1.15 g of phosphoric acid in 1000 mL of water (Solution B).

Mix together equal parts of Solution A and Solution B.