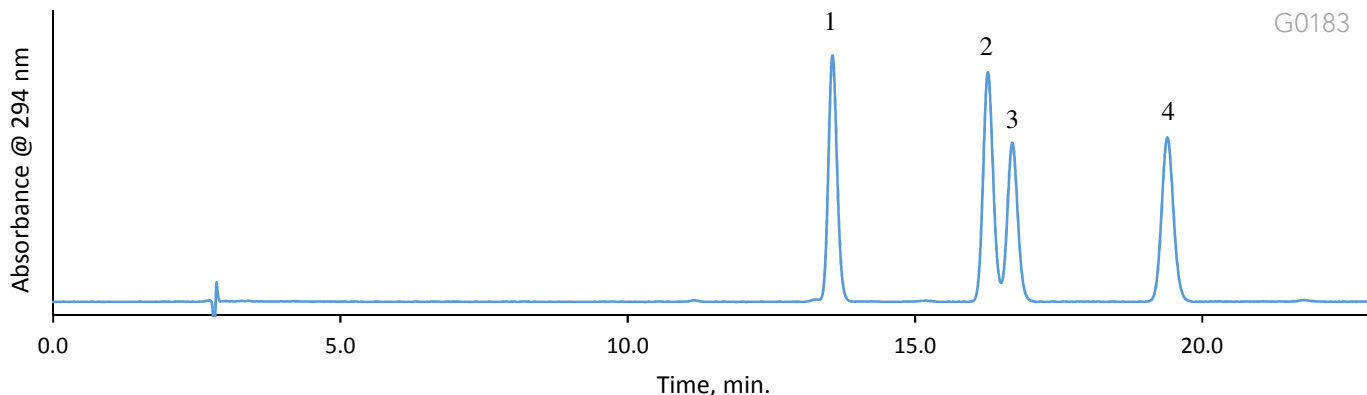


Separation of Tocopherols on HALO® C30 based on GB (Chinese Standards)



TEST CONDITIONS:

Columns: HALO 160 Å C30, 2.7 μm, 4.6 x 250mm
Part Number: 92114-930

Mobile Phase A: Water

Mobile Phase B: Methanol

Isocratic: 95% B

Flow Rate: 0.9 mL/min

Initial Pressure: 240 bar

Temperature: 30°C

Detection: UV 294 nm, PDA

Injection Volume: 20 μL

Sample Solvent: Methanol

Data Rate: 20 Hz

Response Time: 2 sec.

Flow Cell: 13 μL

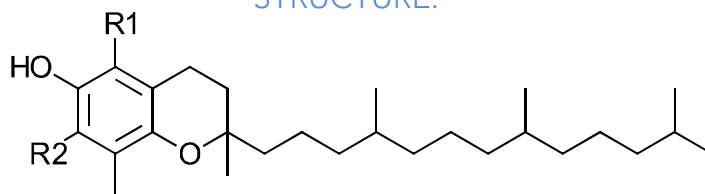
LC System: Agilent 1100

Data Courtesy of Beijing Institute for Drug Control

PEAK IDENTITIES:

1. δ-tocopherol
2. γ-tocopherol
3. β-tocopherol
4. α-tocopherol

STRUCTURE:



Tocopherol	R1	R2
Alpha (α)	CH ₃	CH ₃
Beta (β)	CH ₃	H
Gamma (γ)	H	CH ₃
Delta (δ)	H	H

Tocopherols are forms of vitamin E (fat-soluble) that have antioxidant properties in both the human body and in food. They are also used for cosmetics and many personal care products. Here, tocopherols are separated on a 250 mm 160 Å pore size HALO® C30 column using a GB (Chinese standard) method. Due to the shape selectivity of the C30 phase, separation of the four isomers is achieved.