

Application Report 141

Separation of Catechols and Resorcinols Using Ascentis™ RP-Amide

This application demonstrates the suitability of Ascentis RP-Amide for the efficient separation catechol, catechol derivatives (3-methyl catechol, 4-methyl catechol, 4-nitro catechol), resorcinol and resorcinol derivatives (2-methyl resorcinol and 2,5-dimethyl resorcinol) by HPLC.

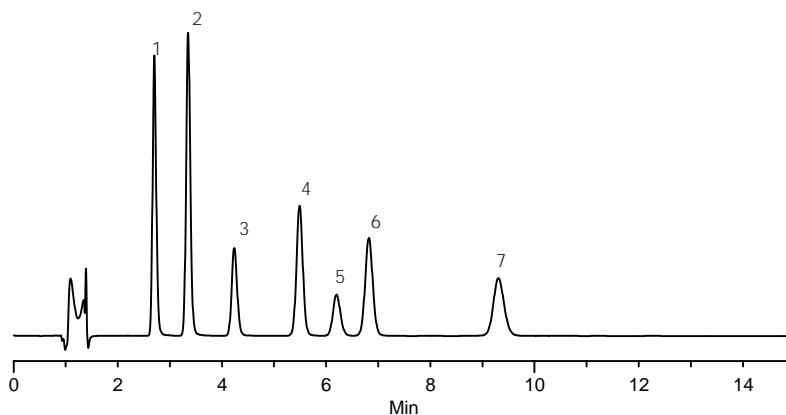
Key Words

Ascentis RP-Amide, 565324-U, catechol, 120-80-9, 13,501-1, 3-methyl catechol, 488-17-5, M34006, 4-methyl catechol, 452-86-8, M34200, 4-nitro catechol, 3316-09-4, N15553, resorcinol, 108-46-3, R406, 2-methyl resorcinol, 608-25-3, 302589, 2,5-dimethyl resorcinol, 488-87-9, 37,827-5

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Acquisition System: Hitachi LC

Notebook Reference: 1550-13



G002597

Conditions

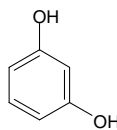
column: Ascentis RP-Amide, 15 cm x 4.6 mm I.D., 5 µm particles (565324-U)
mobile phase: 75:25, 20 mM phosphoric acid (pH 2.0 unadjusted):acetonitrile
temp.: 30 °C
flow rate: 1.5 mL/min.
det.: UV, 270 nm
injection: 25 µL
sample: as indicated in 20 mM phosphoric acid (pH 2.0)

Peak IDs

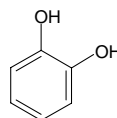
1. Resorcinol (50 mg/mL)
2. Catechol (50 mg/mL)
3. 2-methyl resorcinol (50 mg/mL)
4. 4-methyl catechol (50 mg/mL)
5. 2,5-dimethyl resorcinol (50 mg/mL)
6. 3-methyl catechol (50 mg/mL)
7. 4-nitro catechol (50 mg/mL)

Structures

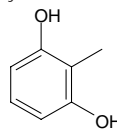
Resorcinol - G002594



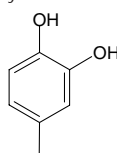
Catechol - G002590



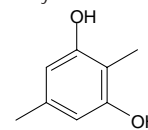
2-methyl resorcinol - G002595



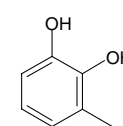
4-methyl catechol - G002592



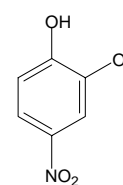
2,5-dimethyl resorcinol - G002596



3-methyl catechol - G002591



4-nitro catechol - G002593



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