

# CoreFocus Report

No.557

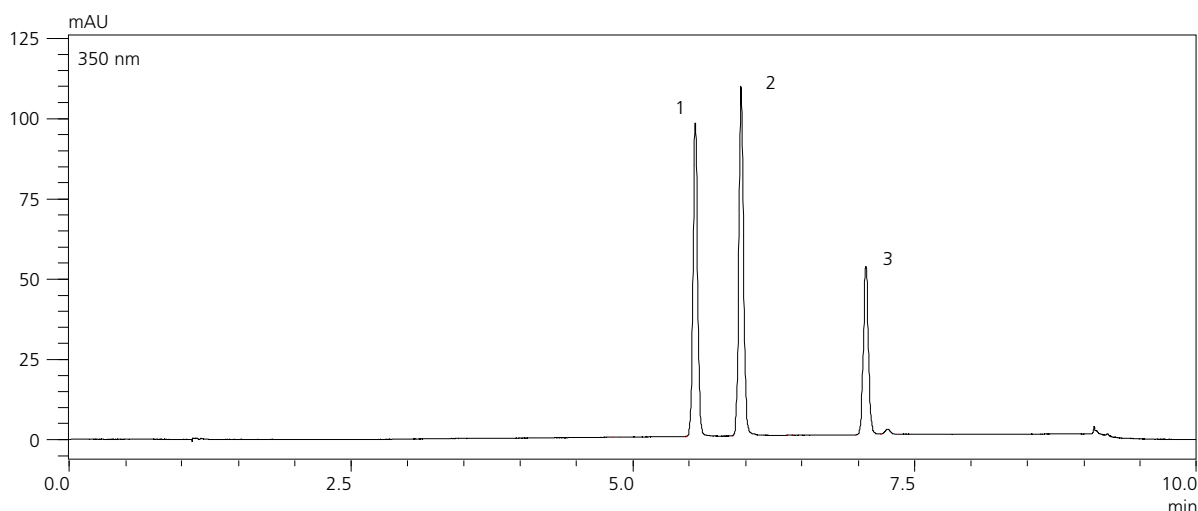
SFC

Shim-pack Series

## Shim-pack™ UC-Diol II

## Analysis of Organic Light-Emitting Diode (OLED) material

**Keywords:** Organic Light-Emitting Diode, Polycyclic aromatic, NPD 123847-85-8 (CAS no.), Methoxy TPD 169685-34-1 (CAS no.), TPD 65181-78-4 (CAS no.)



1. N,N'-Bis(3-methylphenyl)-N,N'-diphenylbenzidine (TPD)
2. N,N'-Bis(4-methoxy-2-methylphenyl)-N,N'-diphenylbenzidine (Methoxy TPD)
3. N,N'-Bis(1-naphthyl)-N,N'-diphenylbenzidine (NPD)  
(250 mg/L each in tetrahydrofuran)

|                  |                                                                                                                |
|------------------|----------------------------------------------------------------------------------------------------------------|
| System           | : Nexera™ UC                                                                                                   |
| Column           | : Shim-pack UC-Diol II (250 mm x 4.6 mm I.D., 5 μm)<br>P/N : 227-32606-22 (Japan), 227-32606-02 (except Japan) |
| Mobile phase     | : A) CO <sub>2</sub><br>B) Acetonitrile                                                                        |
| Time program     | : B conc. 2% (0 – 1.00 min) → 40% (6.00 min – 8.00 min) → 2% (8.01 min – 10.00 min)                            |
| Flow rate        | : 3.0 mL/min                                                                                                   |
| Column temp.     | : 40°C                                                                                                         |
| Injection volume | : 5 μL                                                                                                         |
| BPR pressure     | : 10 Mpa                                                                                                       |
| BPR temperature  | : 40°C                                                                                                         |
| Detection        | : UV 350 nm (reference 400 nm)                                                                                 |
| Vial             | : SHIMADZU LabTotal™ for LC 1.5 mL, Glass, P/N : 227-34001-01                                                  |

Source : Application News 01-00135 ([JP](#), [ENG](#))

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