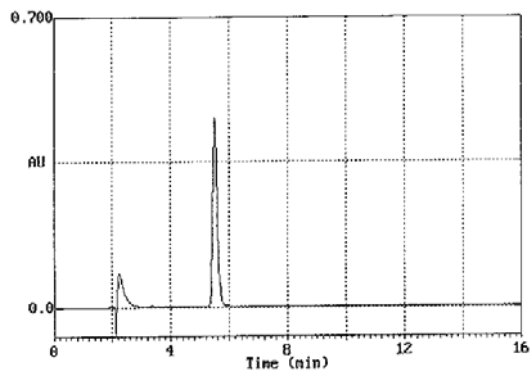


Pentacene

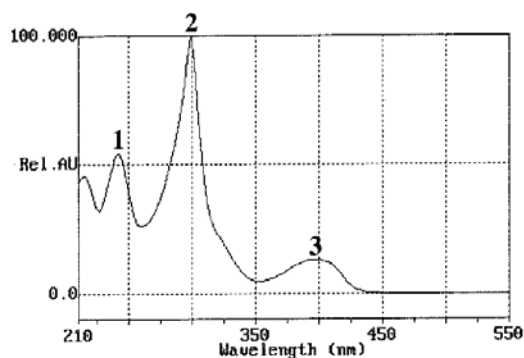
Chromatogram	UV spectrum	Physical Properties
Japanese version	Alphabetical Order	Order of F number
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Chromatogram



Mobile phase : MeOH 100%,
 flow-rate 1.0mL/min.
 Column : Superiorex (150mm x 4.6mm i.d.,
 monomericODS, particle size 5 μ m) (Shiseido).
 Wavelength : 300nm.
 Temperature : r.t..
 Retention time : 5.49min.

UV spectrum





1 : $f_{\text{E}_{\text{max}}} = 242\text{nm}$ (54.6)
 2 : $f_{\text{E}_{\text{max}}} = 299\text{nm}$ (100.0)
 3 : $f_{\text{E}_{\text{max}}} = 398\text{nm}$ (13.3)

[Instrumentation]

- LC Device
 - 880 PU LC pump (Jasco, Hachioji, Japan)
 - MD-915 UV/VIS multiwavelength detector (Jasco, Hachioji, Japan)
- Data processing system
 - DP-L910/915 (Jasco, Hachioji, Japan)
 (Wavelength Accumulation 3nm, Time Accumulation 0.8sec.)

Physical Properties

1. Chemical Formula : C₂₂H₁₄
2. Molecular weight : 278.35
3. Melting point : 300 $^{\circ}$ C

4. Boiling point : 529 Ž
5. Resonance energy : 2.004 eV
6. Heat of vaporization : 74.4 KJ / mol
7. Molecular connectivity X : 7.619
8. Length / Breadth Ratio : 2.18 ( [L/B](#))
9. F number : 11.0 ( [F number](#))
10. Vapour pressure at 25Ž : $1.0+0.8 \times 10^{-13}$ Pa
11. Enthalpy of sublimation at 25Ž : 184+10 KJ / mol

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