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2,4,6-Tris(2',4',6'-trimethylphenylethynyl) mesitylene

Laura Jeffries
MSU Graduate Student

Eric Bosch
Missouri State University

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Laura Jeffries and Eric Bosch*

Chemistry Department, Southwest Missouri State University, 901 South National Avenue, Springfield, MO 65804, USA. E-mail: erb625f@mail.smsu.edu

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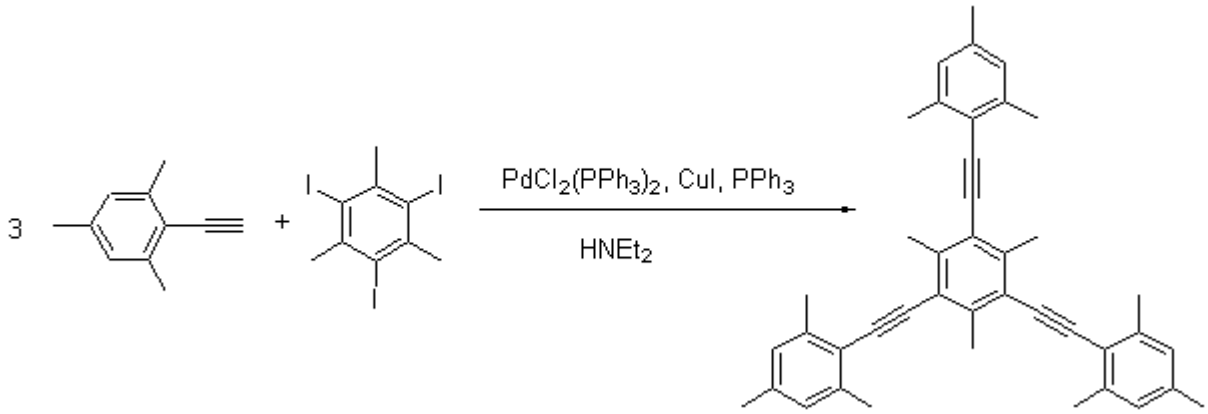

The experimental procedure follows the general synthesis of arylalkynes reported by Sonogashira [1]. Thus a solution of 2,4,6-triiodomesitylene (1.14 g, 2.29 mmol), 2-ethynylmesitylene (1.1 g, 7.638 mmol), bis(triphenylphosphine)palladium dichloride (0.089 g), copper iodide (0.041 g) and triphenylphosphine (0.225 g) in triethyl amine (40 mL) was refluxed under an argon atmosphere for 48 h [2,3]. The solvent was removed in vacuo and the solid residue washed with dichloromethane and water. The residue was dissolved in hot toluene and allowed to crystallize slowly yielding 0.95 g of the title compound as fine pale green needles (76 % yield).

M.p. 318-322 °C.

IR (KBr): 3019, 2960, 2920, 2848, 2197, 1618, 1485 cm^{-1}.

^1H NMR (200 MHz, $CDCl_3$): 2.31 (9H, s, CH_3), 2.53 (18H, s, CH_3), 2.83 (9H, s, CH_3), 6.94 (6H, s, Ar-H).

Anal. Calcd. for $C_{42}H_{42}$, C: 92.25, H: 7.74. Found C: 91.60, H: 7.75.

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References and Notes

1. Takahashi, S.; Kuroyama, Y., Sonogashira, K.; Hagihara, N. *Synthesis* **1980**, 627.

2. 2-Ethynylmesitylene was prepared according to the general procedure in reference 1.

3. Full characterization of 2-ethynylmesitylene is reported in: Tinnenmans, A. H. A.; Laarhoven, W. H. *Tetrahedron* **1979**, *35*, 1537.

Sample Availability: Available from the authors.