

ERRATA

TO WHAT EXTENT IS A π -ALLYLIC INTERMEDIATE
INVOLVED IN SOME PALLADIUM-CATALYZED ALKYLATIONS ?

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Paris-Sud, 91405-Orsay FrancePlease note the following corrections to the above paper:
p. 1400, on lines 4 and 5 delete and its racemic mixture (entry 1)on line 9 delete 1 and 2,

Also below is a revised version of Table 1

Palladium-catalyzed addition of sodium dimethyl malonate and sodium cyclopentadienide on allylic substrates in THF^{a)}.

Entry	Substrate	phosphine ligand	nucleophile	(%) yield	Product $(\alpha)_D(\text{CHCl}_3)$	$\alpha/\gamma^b)$
1	dl - <u>6a</u>	(-) diop	sodium dimethyl malonate	82	+ 3.9°	
2	dl - <u>6a</u>	(+) diop	"	88	- 3.89°	
3	<u>5</u>	(-) diop	"	40	+ 1.20°	
4	(+)- <u>6a</u> ^{c)}	(-) diop	"	52	+ 4.10° ^{j)}	
5	dl - <u>6b</u>	(-) diop	"	66	+ 0.69°	
6	(+)- <u>6b</u> ^{d)}	(-) diop	"	76	+ 2.1°	
7	(+)- <u>6c</u> ^{e)}	(-) diop	"	89	+ 1.69°	
8	(+)- <u>6c</u> ^{e)}	(+) diop	"	58	- 2.86°	
9	(+)- <u>6c</u> ^{e)}	dppb ^{h)}	"	72	- 0.15°	
10	<u>7</u> ^{f)}	(-) diop	"	68	+ 1.31°	0.78
11	<u>7</u> ^{f)}	(+) diop	"	84	- 2.66°	1.56
12	<u>7</u>	dppb ^{h)}	"	83	- 0.32°	1.04
13	(+)- <u>6c</u>	(-) diop	sodium cyclopentadienide	58	-16.1°	
14	(+)- <u>6c</u>	dppe ⁱ⁾	"	69	- 1.6°	

a) 48 hr at room temperature : catalyst Pd(dba)₂ (2.6 x 10⁻⁵ mole) ; phosphine (2.6 x 10⁻⁵ mole allylic acetate (2.6 x 10⁻³ mole) ; b) α/γ ratio for overall substitution was determined by integration of the cyclic vinyl and methine protons in the ¹H n.m.r. spectra of 8; c) $(\alpha)_D^{20}$ + 105.4° (c = 10, hexane) ; d) $(\alpha)_D^{20}$ + 40.7° (c = 10.5, hexane) ; e) Obtained from LAH reduction of (-)-carvone in ether at 0°C and successive acetylation : $(\alpha)_D^{22}$ - 50.2° (c = 5.8, hexane) f) Obtained from LAD reduction of (-)-carvone in ether at 0°C and successive acetylation ; $(\alpha)_D^{22}$ - 50.2° (c = 8, hexane) ; g) Diop is 2,3-isopropylidenedioxy-1,4-bis(diphenylphosphino)-butane, (-)-diop $(\alpha)_D^{22}$ - 12.4° (c = 2, benzene) ; (+)-diop $(\alpha)_D^{22}$ + 12.5° (c = 2, benzene) ⁷; h) dppb stands for 1,2-bis(diphenylphosphino)butane ; i) dppe stands for 1,2-bis(diphenylphosphino)ethane ; j) the configuration of this compound has been shown to be R by chemical correlation to (+)-(S)-3-(2-hydroxyethyl)cyclohexene⁸.