

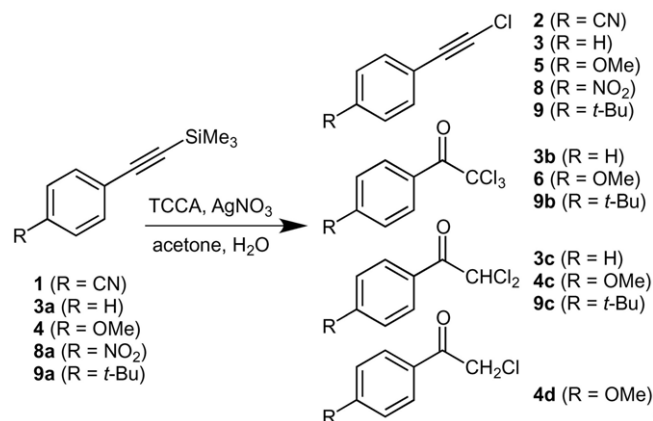
Erratum

Synthesis of 1-Chloroalkynes from Alkynylsilanes Using Trichloroisocyanuric Acid as Chlorinating Agent

Mie Højer Vilhelmsen, Asbjørn Sune Andersson, Mogens Brøndsted Nielsen* *Synthesis* **2009**, 1469.

When revisiting the reaction conditions and the product composition of the previously reported chlorination reaction, we found that the reaction products are, in the case of unsubstituted and donor-substituted arylalkynes (R = H, OMe, *t*-Bu), not exclusively the reported chloroalkynes but to a large extent also chlorinated ketones.

Corrected products and yields under various conditions for the chlorination of $p\text{-RC}_6\text{H}_4\text{C}\equiv\text{CSiMe}_3$ using trichloroisocyanuric acid (TCCA) and silver nitrate are provided here. These should replace Scheme 2 and Table 1 in the original paper. We apologize for the mistake and for any inconvenience it may have caused.



Scheme 2

Table 1 Corrected Products and Yields Obtained from Chlorination of $p\text{-RC}_6\text{H}_4\text{C}\equiv\text{CSiMe}_3$

R (starting material)	Scale ^a	TCCA ^b	AgNO ₃ ^c	Conditions ^d	Product yields (%)
CN (1)	1.53	1.03	0.10	0 °C for 5 h	2 (93)
CN (1)	1.59	1.03	0.19	H ₂ O (19 equiv); 0 °C for 30 min, then 40 °C for 24 h	2 (84)
CN (1)	1.54	1.07	0.20	H ₂ O (20 equiv); 0 °C for 30 min, then μw for 5 min	2 (98)
H (3a)	1.82	1.00	0.10	0 °C for 5 h, then r.t. for 19 h	3b (23)
H (3a)	1.02	1.08	0.21	0 °C for 30 min, then reflux for 20 h	3 (7); 3b (34); 3c (8)
H (3a)	1.02	1.09	0.20	0 °C for 30 min, then μw for 5 min	3 (<20); 3b (8); 3c (10)
OMe (4)	1.54	1.00	–	Bu ₄ NF (1 M soln in THF; 0.68 equiv); 0 °C for 70 min, then r.t. for 30 min	5 (11); 6 (25)
OMe (4)	1.59	1.07	0.09	0 °C for 30 min, then 40–50 °C for 72 h	6 (31); 4c (27); 4d (21)
OMe (4)	1.03	1.07	0.20	0 °C for 30 min, then reflux for 20 h	6 (29); 4c (37)
OMe (4)	1.03	1.08	0.19	0 °C for 30 min, then μw for 5 min	6 (26); 4c (24)
NO ₂ (8a)	1.38	1.10	0.21	H ₂ O (20 equiv); 0 °C for 30 min, then 40 °C for 24 h	8 (50)
NO ₂ (8a)	1.40	1.12	0.21	H ₂ O (20 equiv); 0 °C for 5 min, then μw for 5 min	8 (42)
NO ₂ (8a)	1.00	1.12	0.20	0 °C for 30 min, then reflux for 20 h	8 (76)
NO ₂ (8a)	1.00	1.10	0.20	0 °C for 30 min, then μw for 5 min	8 (>99)
<i>t</i> -Bu (9a)	1.08	1.13	0.23	H ₂ O (20 equiv); 0 °C for 30 min, then 40 °C for 30 min	9 (43); 9b (57)
<i>t</i> -Bu (9a)	0.84	1.11	0.20	H ₂ O (20 equiv); 0 °C for 5 min, then μw for 5 min	9 (26); 9b (58)
<i>t</i> -Bu (9a)	0.97	1.13	0.21	0 °C for 30 min, then reflux for 20 h	9b (34); 9c (23)
<i>t</i> -Bu (9a)	1.02	1.08	0.20	0 °C for 30 min, then μw for 5 min	9b (19); 9c (<13)

^a Amount of $p\text{-RC}_6\text{H}_4\text{C}\equiv\text{CSiMe}_3$ in mmol.

^b Molar equivalents of TCCA relative to $p\text{-RC}_6\text{H}_4\text{C}\equiv\text{CSiMe}_3$.

^c Molar equivalents of AgNO₃ relative to $p\text{-RC}_6\text{H}_4\text{C}\equiv\text{CSiMe}_3$.

^d μw = microwave heating at 150 °C.