

Organosilicon Alkynes

Alkynes are highly reactive and the triple bond can exert remarkable effects on the rest of the molecule through a combination of characteristic properties. A number of new organosilicon alkynes derivatives are now available through Alfa Aesar, and many have already been extensively cited in scientific literature.

Researchers at MIT have proposed a two-stage "tandem strategy" for the synthesis of benzofused nitrogen heterocycles, via a benzannulation based on the reaction of cyclobutenones with ynamides derived from H53375.¹ Several groups have described the development of a rhodium-catalyzed asymmetric isomerization of racemic α -arylpropargyl alcohols to β -chiral indanones² of H53426. Similarly, cobalt-catalyzed carbocyclization has been used for the synthesis of indenols and indenenes using H53517, in high yield and excellent regioselectivity.³ In a synthetic approach toward the natural product cytosatin, an inhibitor of protein phosphatase 2A, the subunit of cytosatin has been prepared in a six steps from H53517.⁴ A convenient preparation of functionalized benzo[c]selenophenes involves treatment of isoselenocyanate with lithiated *o*-bromoethynylbenzenes (H53402).⁵ Recent patents have shown that H53487 to be effective component of pharmaceutically active compounds such as potential metalloproteinase inhibitors,⁶ in the treatment of cystic fibrosis,⁷ or the treatment of vascular diseases.⁸

Alfa Aesar has extended its comprehensive range of heterocyclic compounds with the following organosilicon alkynes.

Item	CAS	Description	Sizes
H53375	18163-47-8	1-Iodo-2-(trimethylsilyl)acetylene, 97%	1g, 5g, 25g
H53376	2117-12-6	4-Trimethylsilyl-3-butyn-1-ol, 98%	5g, 25g
H53380	5683-31-8	3-(Trimethylsilyl)propionic acid, 97%	1g, 5g, 25g
H53389	174064-02-9	5-Triethylsilyl-4-pentyn-1-ol, 97%	5g, 25g
H53390	16116-80-6	4-(Trimethylsilylethynyl)benzoic acid, 97%	1g, 5g, 25g
H53393	77113-48-5	1-Chloro-5-trimethylsilyl-4-pentyne, 97%	5g, 25g
H53397	87219-80-5	3-(Trimethylsilyl)propionaldehyde diethyl acetal, 97%	5g, 25g
H53402	38274-16-7	(2-Bromophenylethynyl)trimethylsilane, 98%	1g, 5g, 25g
H53405	89343-06-6	Triisopropylsilylacetylene, 97%	5g, 25g
H53423	18270-17-2	1-Trimethylsilyl-1-pentyne, 98%	5g, 25g, 100g
H53426	89530-34-7	1-Phenyl-3-trimethylsilyl-2-propyn-1-ol, 98%	5g, 25g
H53436	71789-10-1	1-Trimethylsilyl-1,4-pentadiyne, 98%	1g, 5g, 25g
H53438	160194-29-6	4-Triethylsilyl-3-butyn-1-ol, 98%	5g, 25g
H53457	13224-84-5	5-Trimethylsilyl-4-pentyn-1-ol, 97%	5g, 25g
H53477	17869-76-0	2-Trimethylsilyloxy-3-butyne, 97%	5g, 25g
H53487	81166-84-9	Cyclopropyl(trimethylsilyl)acetylene, 97%	5g, 25g
H53488	160194-28-5	1-Triethylsilyl-4-triethylsilyloxy-1-butyne, 97%	5g, 25g
H53494	86318-61-8	tert-Butyldimethylsilylacetylene, 98%	1g, 5g, 25g
H53515	174125-30-5	1-Chloro-5-triethylsilyl-4-pentyne, 97%	5g, 25g
H53517	16205-84-8	Ethyl 3-(trimethylsilyl)propiolate, 98%	1g, 5g, 25g

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⁴A.-F. Salit, C. Meyer, J. Cossy, B. Delouvie, & L. Hennequin, *Tetrahedron*, 2008, **64**, 6684.

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⁶Wyeth, Patent: US2005/143422 A1, 2005.

⁷Vertex Pharmaceuticals Incorporated, Patent: US2011/98311 A1, 2011.

⁸Bristol-Myers Squibb Company; T.G M. Dhar, H.-Y Xiao, S. H. Watterson, S. S. Ko, A. J. Dyckman, C. M. Langevine, J. Das, R. J. Cherney, Patent: WO2011/59784 A1, 2011.