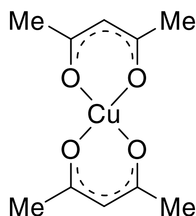
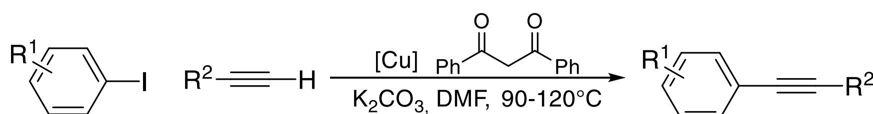
Catalog # 93-2968 Copper(II) acetylacetonate, 98+%



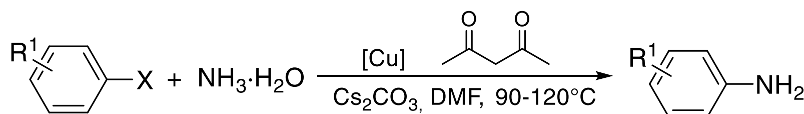
Catalysis Applications

Technical Notes:

1. Catalyst for the Sonogashira-type reactions under mild palladium-free conditions
2. Catalyst for the synthesis of anilines using aqueous ammonia
3. Catalyst used for direct amination of azoles with chloroamines at room temperature
4. Catalyst for C–H allylation of electron-deficient arenes with allyl phosphates
5. Ctalyst for oxoazidation and alkoxyazidation of indoles
6. Used in Cu-chiral bipyridine catalyzed asymmetric silyl conjugate addition in water
7. Efficient catalyst for aerobic oxidation of aldehydes in water
8. Catalyst for the hydroxylation of (hetero)aryl halides under mild conditions
9. Used in the one-step synthesis of three-component radical coupling of [1.1.1]propellane to afford diverse drug-like functionalized bicyclopentanes using various radical precursors and heteroatom nucleophiles via a metallaphotoredox catalysis protocol
10. Electrocatalyst used for diazidation of alkenes at ppm catalyst loading



Tech Note (1)
Ref. (1)



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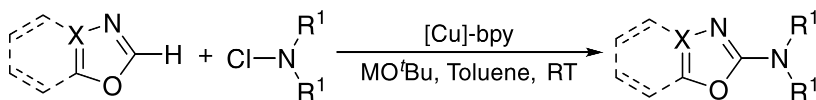

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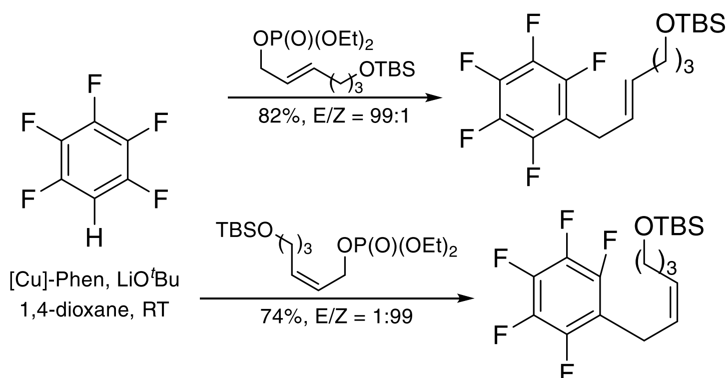

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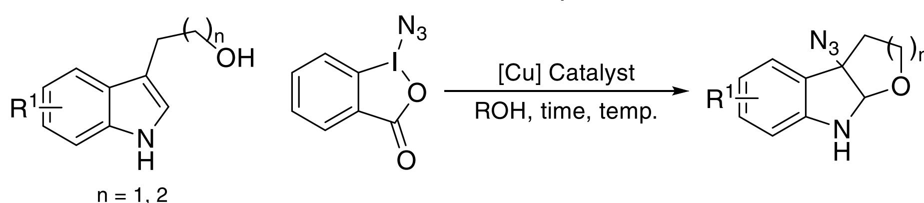

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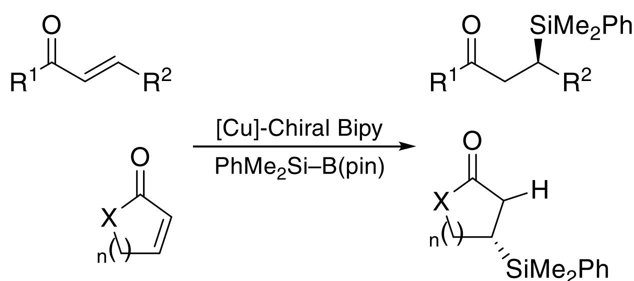

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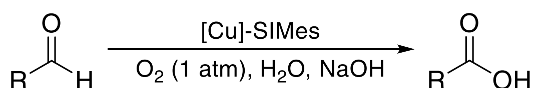

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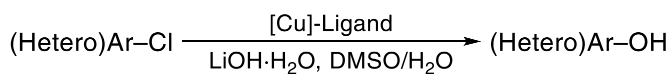

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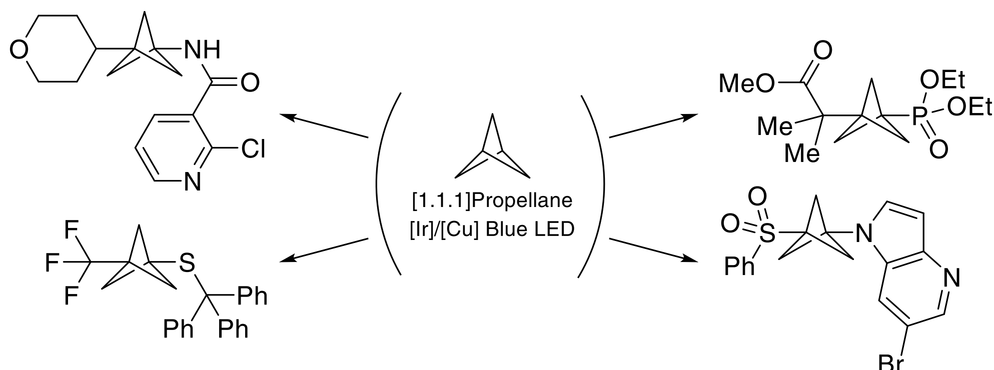
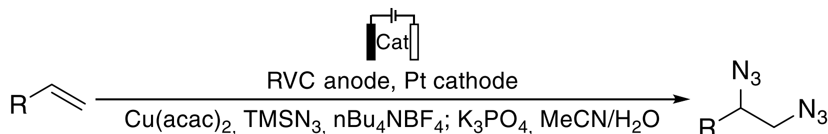


Tech Note (9)
Ref. (9)



Tech Note (10)
Ref. (10)

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CVD/ALD Applications

Thermal Behavior:
- Melting point 284-285° dec.
- Sublimation 78°C/0.05 Torr
- TGA data and diagram are available in [1, 4]
- Vapor Pressure: 0.1 Torr/163°C; Detailed studies are available [2-3]

Technical Notes:
1. Used for thin copper film deposition

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Cu	ALD RE-ALD PE-ALD ALD	130°C 125°C 138°C 130-140°C	0.5-0.75 Torr 0.75 Torr 1.7-2.1 Torr 1.5-2.25 Torr	H_2 H· $^{PL}H_2$ HQ, (H_2O)	250°C 140°C 85-135°C 160-250°C	4 5 6-7 8-9
CuO	ALD	140°C	2.25 Torr	O_3	150-250°C	10
Cu_xS	ALD ALD	130°C 140°C	0.75-3.75 Torr 2.25-3 Torr	H_2S S	130-200°C 140-160°C	11 12

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