Catalog # 93-2988 Copper(II) acetate, anhydrous, min. 97%

Cu(OOCCH₃)₂

Catalysis Applications

Technical Notes:

- Catalyst for sulfenylation of benzoic acid derivative β-C-H bonds and benzylamine derivative γ-C-H bonds
- 2. Used in enantio- and regioselective CuH-catalyzed hydroamination of alkenes
- 3. Used in Cu-catalysed selective hydroamination reactions of alkynes
- 4. Catalyst for asymmetric hydroamination of unactivated internal olefins to aliphatic amines
- 5. Catalyst for asymmetric addition of olefin-derived nucleophiles to ketones
- 6. Catalyst for enantioselective stereodivergent synthesis of amino alcohols
- Used in highly regio- and enantioselective Cu-catalyzed reductive hydroxymethylation of styrenes and 1,3dienes with CO₂
- Used in enantioselective synthesis of trisubstituted allenyl

 –B(pin) Compounds by phosphine/Cu-catalyzed
 1,3-enyne hydroboration
- Catalyst used in tandem ring-opening/cyclization reactions of cyclopropanols with aryldiazonium salts to generate N-arylpyrazoles
- 10. Used in site-selective Cu-catalyzed azidation of benzylic C-H bonds
- 11. Catalyst used in proton-directed selective hydroxymethylation of alkynes with CO2

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References:

- 1. J. Am. Chem. Soc. 2012, 134, 18237
- 2. J. Am. Chem. Soc. 2013, 135, 15746
- 3. Nat. Chem. 2015, 7, 38
- 4. Science 2015, 349, 62
- 5. Science 2016, 353, 144
- 6. Nature 2016, 532, 353
- 7. J. Am. Chem. Soc. 2017, 139, 17011
- 8. J. Am. Chem. Soc. 2018, 140, 2643
- 9. Chem. Commun. 2020, 56, 2202
- 10. J. Am. Chem. Soc. 2020, 142, 11388

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11. Angew. Chem. Int. Ed. 2021, 60, 3984

CVD/ALD Applications

Thermal Behavior:

Boiling point: 240°C

Technical Notes:

1. ALD precursor for thin copper film deposition

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Cu	PE-ALD	138°C	1.7-2.1 Torr	PLH ₂	85°C	1
Cu ₂ O	ALD	175 or 185°C	7.5 Torr	H ₂ O	180-220°C	2

References:

- 1. <u>ECS Transactions</u>, **2007**, 11, 67
- 2. ACS Omega 2019, 4, 11205