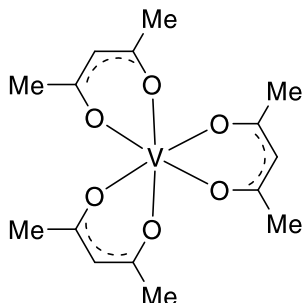


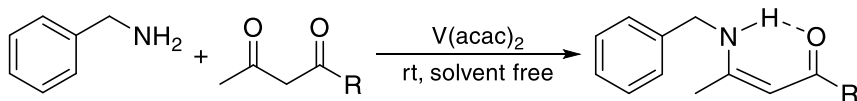
Catalog # 23-2250 Vanadium(III) acetylacetonate, 98%



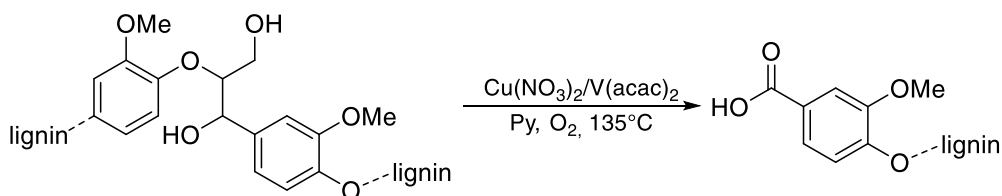
Catalysis Applications

Technical Notes:

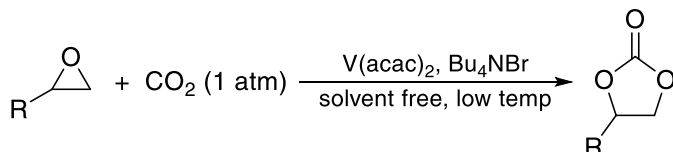
1. Electrolyte used for redox flow batteries
2. Catalyst used for stereoselective synthesis of β -enaminoesters and β -enaminones.
3. Used in V/Cu-catalyzed oxidative cleavage of lignin using oxygen.
4. Catalyst used for chemical fixation of CO₂ into cyclic carbonates under mild conditions.
5. Efficient soluble catalyst for Lithium-Oxygen batteries which tunes the ORR mechanism by controlling superoxide intermediates and reduces the charge voltage by transporting electrons in the electrolyte.



Tech Note (2)
Ref. (2)



Tech Note (3)
Ref. (3)



Tech Note (4)
Ref. (4)

References:

1. [Electroch. Commun. 2009, 11, 2312.](#)
2. [Tetrahedron Lett. 2013, 54, 436.](#)
3. [ChemSusChem 2015, 8, 2106.](#)
4. [Dalton Trans. 2019, 48, 15970.](#)
5. [Angew. Chem. Int. Ed. 2019, 58, 12553.](#)

CVD/ALD Applications

Thermal Behavior:

- Melting point 178°
- Sublimation 170°/0.05 Torr
- TGA data and diagram, vapor pressure calculations and sublimation behavior are available in [1]

Technical Notes:

1. CVD Precursor thin vanadium film deposition.

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
VO _x	AA-CVD	ROH, H ₂ O sol.	AP	-	500-600°C	2
	LP-CVD	150°C	Vacuum	-	350-450°C	3
	CVD	150°C	-	O ₂	350-500°C	4
CoVO _x	AA-CVD	MeOH sol.	-	Co(acac) ₂	475°C	5

References:

1. [J. Chem. Eng. Data. 2009, 54, 2795.](#)
2. [Chem. Vap. Deposition 2007, 13, 145.](#)
3. [RSC Adv. 2017, 7, 10798.](#)
4. [J. Alloys Compd. 2017, 715, 129.](#)
5. [ACS Omega 2019, 4, 12671.](#)