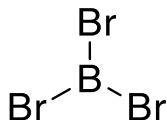


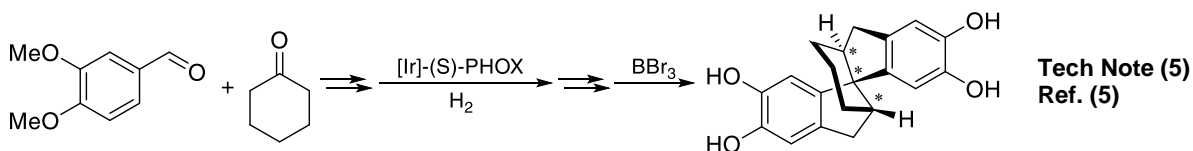
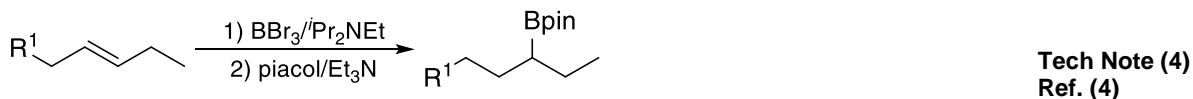
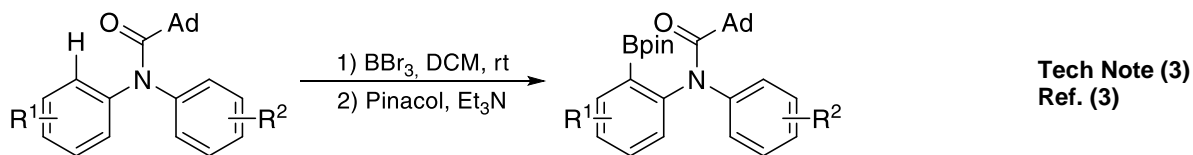
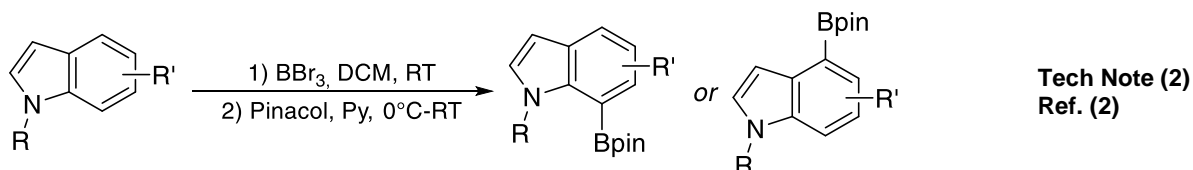
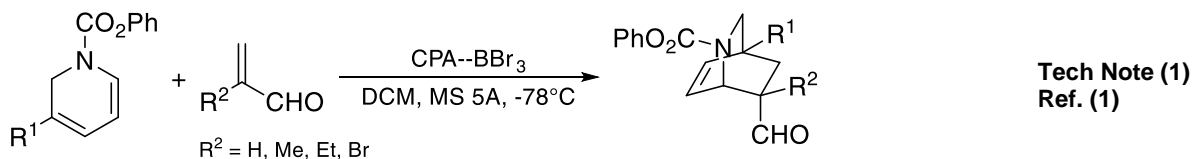
Catalog # 97-1725 Boron bromide, elec. gr. (99.99%-B) PURATREM

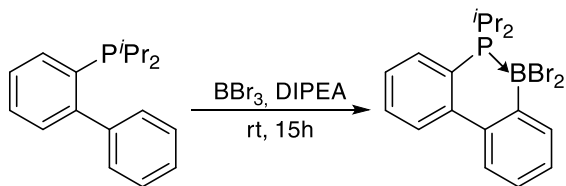


Catalysis Applications

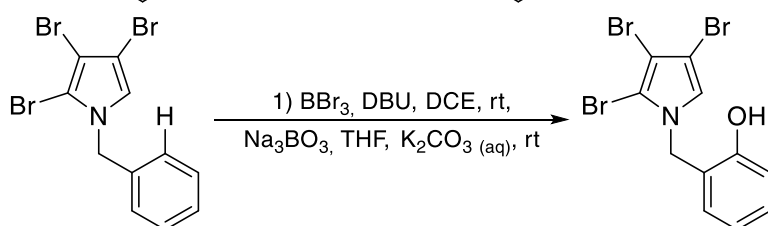
Technical Notes:

1. Used in chiral phosphoric acid catalyzed highly enantioselective Diels-Alder reaction of 1,2-dihydropyridines
2. Catalyst for metal-free directed *sp*²-C-H borylation of arenes and heteroarenes to generate C7- and C4-borylated indoles
3. Catalyst used for C-H borylation of diphenylamines through adamantane-1-carbonyl auxiliary
4. Catalyst for the hydroboration of alkenes in the presence of *t*-Pr₂NEt
5. Used in the enantioselective synthesis of chiroptical polymers of intrinsic microporosity with circular polarized luminescence
6. Catalyst used in metal-free phosphorus-directed borylation of C(*sp*²)-H bonds to generate phosphine-boranes
7. Catalyst use in the metal-free boron-mediated *ortho*-C-H hydroxylation of *N*-benzyl-3,4,5-tribromopyrazoles





Tech Note (6)
Ref. (6)



Tech Note (7)
Ref. (7)

References:

1. [J. Am. Chem. Soc. 2015, 137, 13472.](#)
2. [Nature, 2019, 575, 336.](#)
3. [Org. Lett. 2020, 22, 7003.](#)
4. [Angew. Chem. Int. Ed. 2021, 60, 26238.](#)
5. [Macromolecules 2021, 54, 11180.](#)
6. [Angew. Chem. Int. Ed. 2022, 61, e202110102.](#)
7. [Org. Lett. 2022, 24, 3570.](#)

CVD/ALD Applications

Thermal Behavior:

- Melting point -46°C
- Boiling point 91.3°C
- Vapor pressure 54 Torr/20°C; 74 torr/25°C [2]

Technical Notes:

1. Used for the deposition of boron film

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
BN	ALD	RT	10 Torr	NH ₃	400 °C, 750°C	1
	LA-ALD	25°C	10 Torr	NH ₃	250-750°C	2
	ALD	25°C	-	NH ₃	750°C	3
B ₂ O ₃	ALD	-5°C	-	H ₂ O	20-400°C	4

References:

1. [Thin Solid Films, 2002, 402, 167.](#)
2. [Chem. Vap. Deposition, 2005, 11, 330.](#)
3. [ACS Appl. Mater. Interfaces 2017, 9, 16669.](#)
4. [Thin Solid Films 2006, 514, 145.](#)