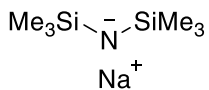


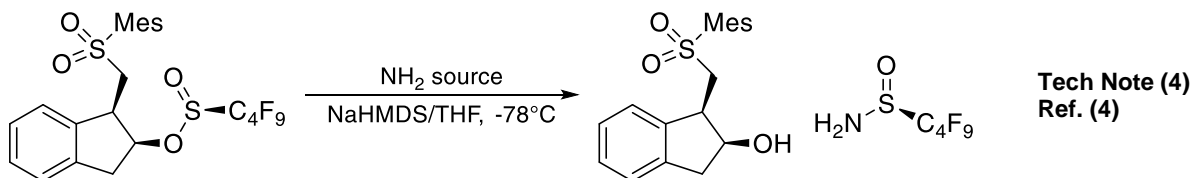
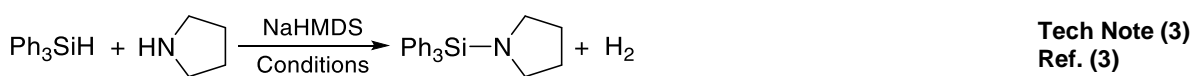
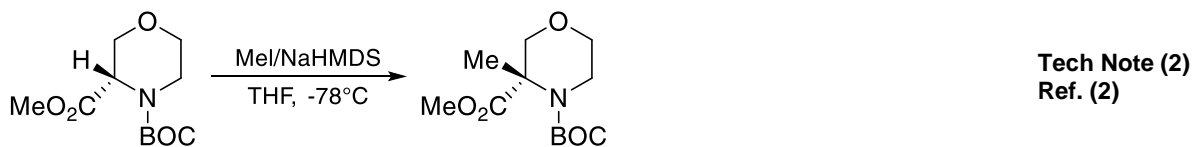
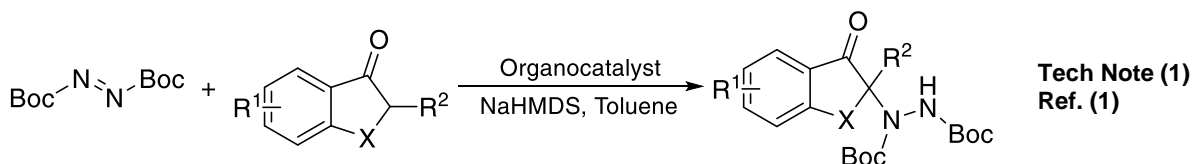
Catalog # 11-1275 CALLERY™ Sodium hexamethyldisilazane, 40% solution in tetrahydrofuran

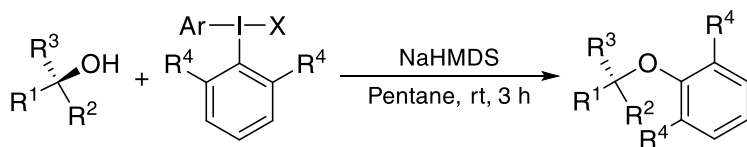


Technical Notes:

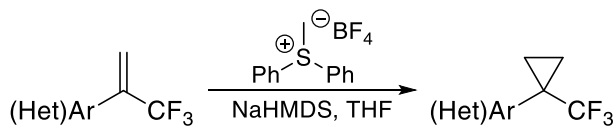
Sodium hexamethyldisilazane (NaHMDS) is a strong non-nucleophilic, hindered amine base, with higher base strength than alkali metal alkoxides ($pK_a=26$). NaHMDS is a useful reagent for wide variety of chemical reactions and transformations. Applications include alkylation, arylation, acylation, ring formation, isomerization, rearrangements, aldol condensations, Wittig and Horner-Emmons reactions and polymerization.

- Amination.** Base additive for the phosphorane-catalyzed enantioselective amination of ketones
- Enantioselective methylation.** Used for enantioselective methylation a morpholine ester retaining of original stereochemistry (memory of chirality concept) with high 99% ee
- Cross-couplings.** Catalyst for the cross-dehydrogenative couplings of hydrosilanes with amines
- Catalyst for the predation of enantiomerically pure perfluorobutanesulfinamide using NaHMDS as the ammonia synthon acting as a nucleophile
- Catalyst used for synthesis of tertiary alkyl aryl ethers by arylation of tertiary alcohols with ortho-substituted diaryliodonium salts
- Base additive for synthesis of trifluoromethyl-cyclopropanes using sulfonium ylides
- Used in alkaline-metal-catalyzed one-pot aminobenylation of aldehydes with toluenes
- Difluoroalkylation of aryl ketones.** Used in blue light promoted difluoroalkylation of aryl ketones to generate quaternary alkyl difluorides and tetrasubstituted monofluoroalkenes
- Allylation.** Used in transition-metal-free allylation of 2-azaallyls with allyl ethers through polar and radical mechanisms

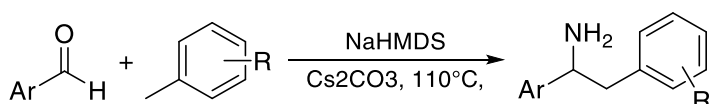




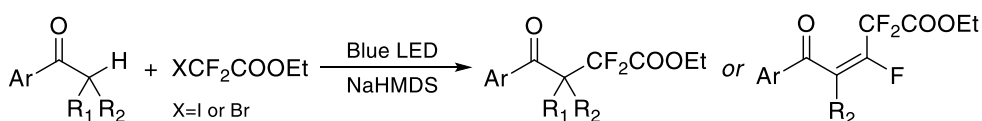
Tech Note (5)
Ref. (5)



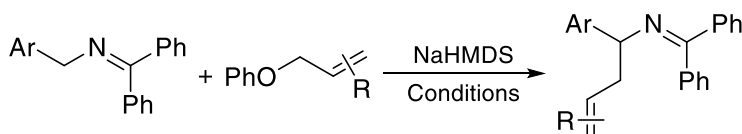
Tech Note (6)
Ref. (6)



Tech Note (7)
Ref. (7)



Tech Note (8)
Ref. (8)



Tech Note (9)
Ref. (9)

References:

1. [J. Am. Chem. Soc. 2013, 135, 15306](#)
2. [Org. Process Res. Dev. 2013, 17, 829](#)
3. [ChemCatChem 2016, 8, 1373](#)
4. [J. Org. Chem. 2016, 81, 1547](#)
5. [Org. Lett. 2016, 18, 4234](#)
6. [Org. Lett. 2019, 21, 2265](#)
7. [Org. Lett. 2019, 21, 8514](#)
8. [Org. Lett. 2020, 22, 4261](#)
9. [Nat. Commun. 2021, 12, 3860](#)