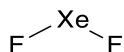


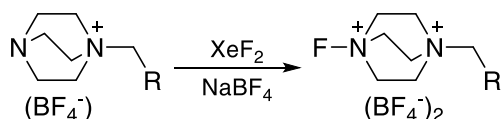
Catalog # 54-1500 Xenon(II) fluoride



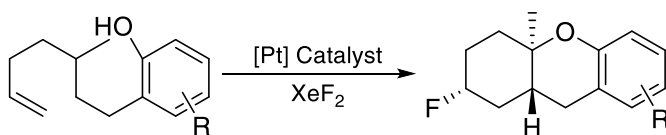
Catalysis Applications

Technical Notes:

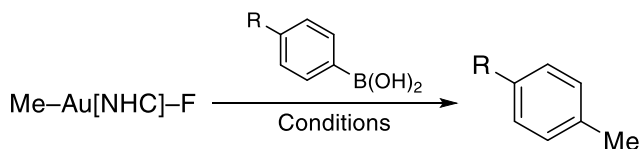
1. Used for the preparation of electrophilic fluorinating agents.
2. Fluorination agent for single-wall carbon nanotubes [2].
3. Used in Pt-catalyzed enantioselective cyclization and C3-fluorination of polyene substrates.
4. Strong oxidizing agent used in Au-catalyzed C–C coupling reactions of arylboronic acids.
5. Used in enantioselective fluorocyclization reactions of 1,3-dienes.
6. Used in [Ni-F₂]-catalyzed C–H bond trifluoromethylation of arenes.
7. Used in Pd-catalysed electrophilic aromatic C–H fluorination.



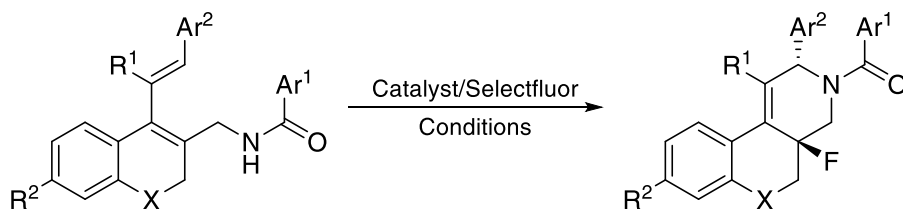
Tech Note (1)
Ref. (1)



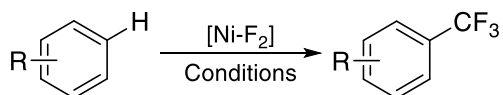
Tech Note (3)
Ref. (3)



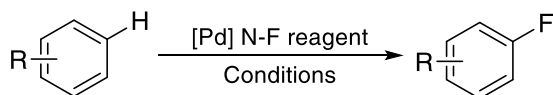
Tech Note (4)
Ref. (4)



Tech Note (5)
Ref. (5)



Tech Note (6)
Ref. (6)



Tech Note (7)
Ref. (7)

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CVD/ALD Applications

Thermal Behavior:

- Melting point: 128.6°C
- Sublimation: 114.35 °C
- Vapor Pressure: 0.039 Torr/25°C

Technical Notes:

1. XeF₂ used in the highly selective isotropic atomic layer etching (ALE) process of SiC [1], SiO₂ [2-3], Mo and Si [4], Ge [5-7], Al₂O₃:HfO₂ [8], ZrO₂:HfO₂ [9], HfO₂@SiO₂ [10], Si₃N₄ [11].
2. Used for *p*-type doping of WSe₂ with vapor XeF₂ [12].

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