

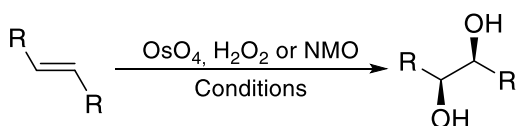
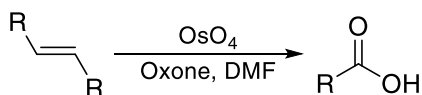
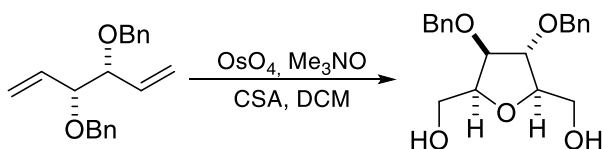
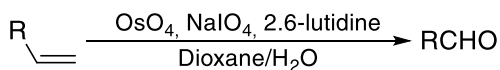
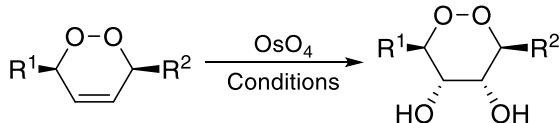
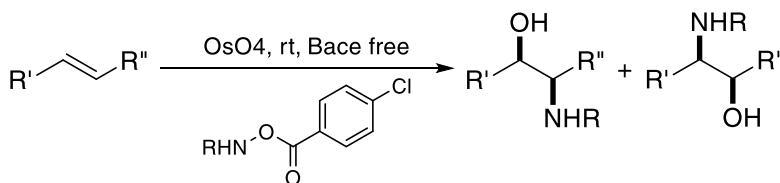
Catalog # 76-2958 Osmium(VIII) oxide (99.99+%-Os) PURATREM

OsO₄

Catalysis Applications

Technical Notes:

1. Catalyst used for asymmetric dihydroxylation of olefins by H₂O₂ or *N*-methylmorpholine-*N*-oxide
2. Catalyst used for oxidative cleavage of olefins
3. Catalyst for oxidative cyclization of 1,5-dienes
4. Catalyst for dihydroxylation of 1,2-dioxines
5. Catalyst for the base-free, intermolecular aminohydroxylation reaction

Tech Note (1)
Ref. (1-3)Tech Note (2)
Ref. (4-5)Tech Note (3)
Ref. (6)Tech Note (4)
Ref. (7)Tech Note (5)
Ref. (8)

References:

1. [J. Am. Chem. Soc. 2001, 123, 1365.](#)
2. [Adv. Synth. Catal. 2002, 344, 421.](#)
3. [Angew. Chem. Int. Ed. 2002, 41, 472.](#)
4. [J. Am. Chem. Soc. 2002, 124, 3824.](#)
5. [Org. Lett. 2004, 6, 3217.](#)

6. [Angew. Chem. Int. Ed. 2003, 42, 948.](#)
7. [J. Org. Chem. 2006, 71, 7236.](#)
8. [J. Org. Chem. 2011, 76, 358.](#)

CVD/ALD Applications

Thermal Behavior:

- Melting point: 40.6°C
- Boiling point: 130.0°C
- Vapor pressure: 7 Torr/20°C

Technical Notes:

1. ALD/CVD precursor for osmium thin film deposition

Target Deposit	Deposition Technique	Delivery Temperature	Pressure	Co-reactants	Deposition Temperature	Ref.
Os	PL-CVD	-	37 mTorr	-	-	1

References:

1. [Appl. Surf. Sci. 2004, 229, 242.](#)