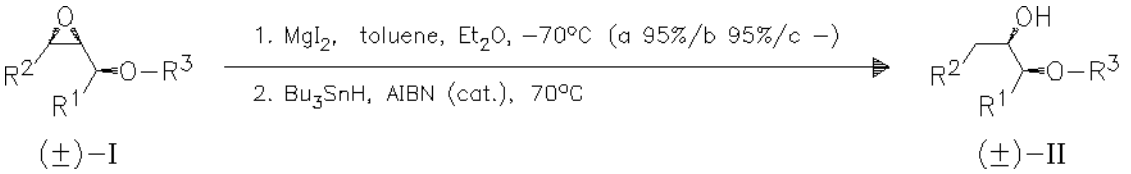
cleavage reactions, decomposition reactions, pyrolysis

O 0100

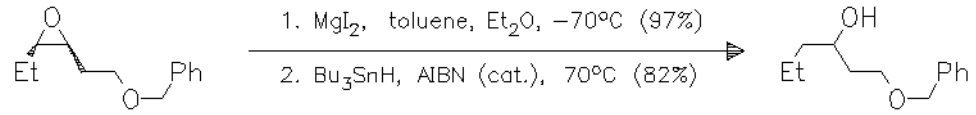
21 - 087

Diols Obtained via Chemo- and Regioselective Ring Opening of Epoxy Alcohols: A Straightforward Synthesis of 2S,3S-Octandiol. — Epoxy alcohols of type (I) undergo chemo- and regioselective ring opening on treatment with MgI2. Subsequent reduction using Bu3SnH leads to diols such as (II). This method can be applied to homoallylic epoxy alcohols and to the synthesis of the pheromone (VII). — (BONINI, C.; RIGHI, G.; Tetrahedron 48 (1992) 8, 1531-1538; Dip. Chim., Univ. Studi Basilicata, 85100 Potanza, Italy; EN)

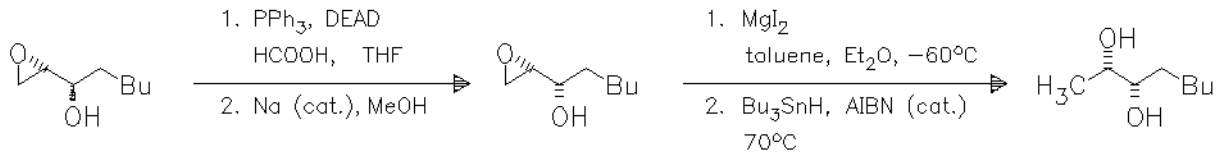


(±)−I (±)−II

a R^1, R^2: —Me ; R^3: —H 80%
b R^1, R^2: —Me ; R^3: $—CH_2—Ph$ 81%
c $R^1—R^2$: $—(CH_2)_3—$; R^3: —H 67%



III IV



V* VI* 52% VII* 91%

DEAD: Et—O—CO—N=N—CO—O—Et