

**Tips of Reducing Agents****(2) Reducing agents and their role**

Group	Product	LAH in ether	LiAlH(OCMe ₃) ₃ in THF	NaBH ₄ in EtOH	LiAlH ₄ + AlCl ₃	B ₂ H ₆ in THF	H ₂ ⁺ catalyst
-CHO	-CH ₂ OH	+	-	+	+	+	+
>C=O	>CH-OH	+	-	+	+	+	+
-CO ₂ H	-CH ₂ OH	+	-	-	+	+	+
-CO ₂ R	-CH ₂ OH	+	-	-	+	+	+
-COCl	-CH ₂ OH	+	+*	+	+	-	+
-CONH ₂	-CH ₂ NH ₂	+	-	-	+	+	+
(RCO) ₂ O	RCH ₂ OH	+	-	-	+	+	+
-CN	-CH ₂ NH ₂	+	-	-	+	+	+
>C=NOH	-CH ₂ NH ₂	+	-	-	+	-	+
RNO ₂	RNH ₂	+	-	-	+	-	+
>C=C<	>CH-CH<	-	-	-	-	+	+
-C≡C-	-CH=CH-	-	-	-	+	+	+
1° RX	RH	+	-	-	+	-	+

* Product is RCHO