

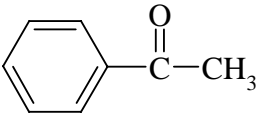
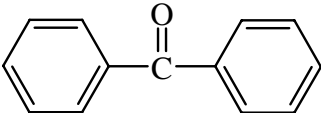
## Aliphatische Aldehyde

systematischer Name (Trivialname)	Konstitution	Stenographie	Siedepunkt [°C]
<b>Methanal</b> (Formaldehyd)			- 21
<b>Ethanal</b> (Acetaldehyd)			20
<b>Propanal</b> (Propionaldehyd)			48
<b>Propenal</b> (Acrolein)			53
<b>(E)-2-Butenal</b> ( <i>trans</i> -Crotonaldehyd)			104
<b>3-Butenal</b>			102

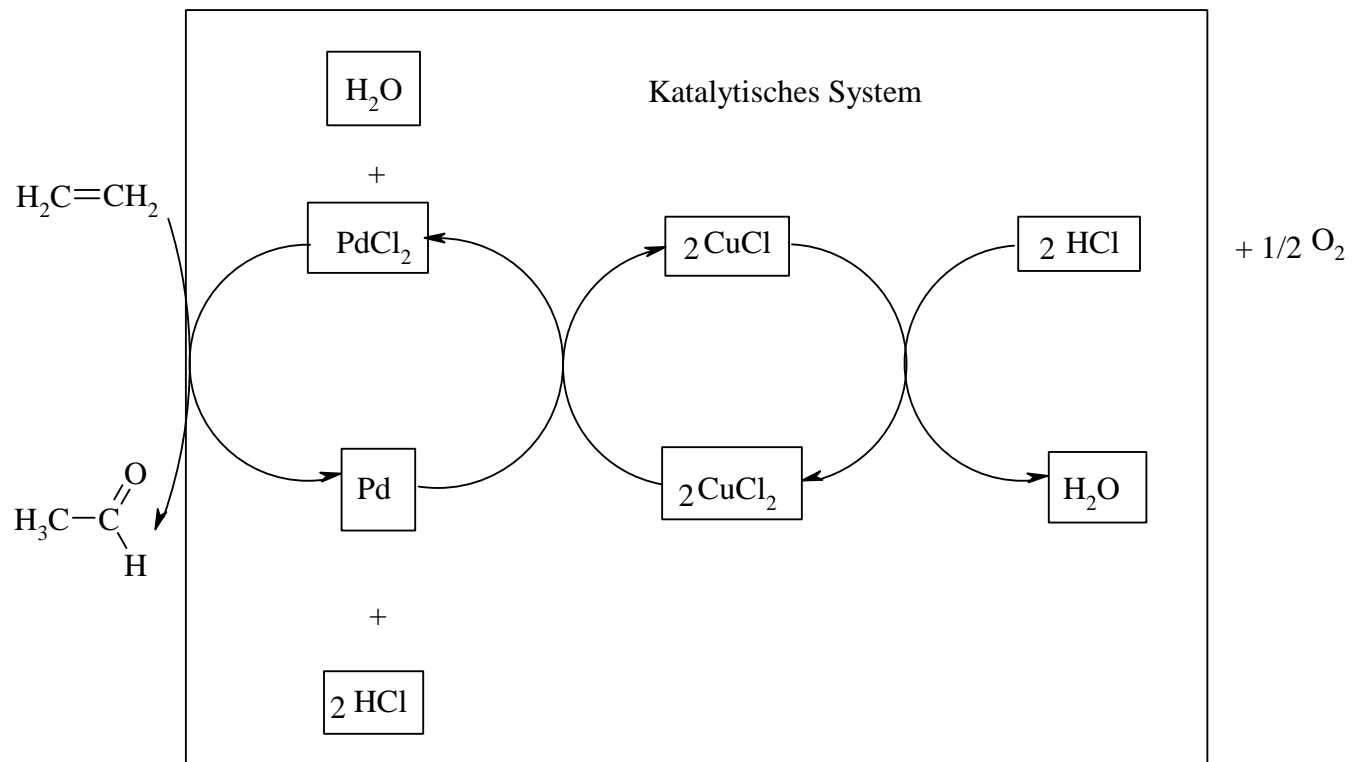
## Aromatische Aldehyde

<b>Benzaldehyd</b>		179
<b>Salicylaldehyd</b>		197

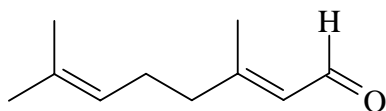
## Ketone

Name (Trivialname)	Konstitution	Siedepunkt [°C]	Schmelzpunkt [°C]
<b>Propanon</b> (Aceton)	$\text{H}_3\text{C}-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_3$	56	-95
<b>Butanon</b> (Methylethylketon)	$\text{H}_3\text{C}-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_2-\text{CH}_3$	80	-87
<b>2-Pentanon</b> (Methylpropylketon)	$\text{H}_3\text{C}-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_2-\text{CH}_2-\text{CH}_3$	102	-78
<b>4-Methyl-2-pentanon</b>	$\text{H}_3\text{C}-\overset{\text{O}}{\parallel}{\text{C}}-\text{CH}_2-\overset{\text{CH}_3}{\text{CH}}-\text{CH}_3$	117	-85
<b>1-Phenylethanon</b> (Acetophenon)		202	20
<b>Diphenylketon</b> (Benzophenon)		306	48

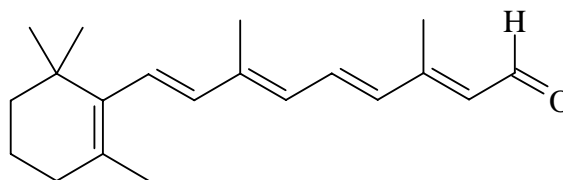
## Industrielle Herstellung von Acetaldehyd nach dem Wacker-Verfahren



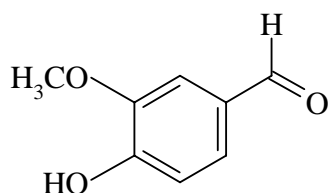
### Natürliche vorkommende Aldehyde und Ketone



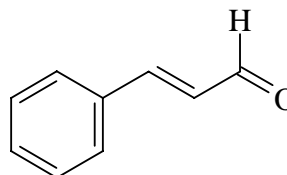
Citral  
(Citronenöl, Lemongrasöl)



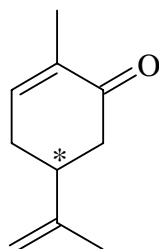
Retinal  
(Vitamin-A-Aldehyd)



Vanillin  
(als Glycosid in Vanilleschoten)



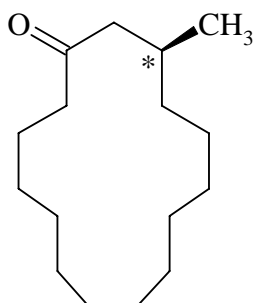
Zimtaldehyd



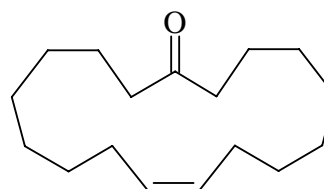
(*R*)-(-)-Carvon (Krauseminze)  
(*S*)-(+)-Carvon (Kümmelöl, Dill)



(+)-Campher  
(Holz des Campherbaums)

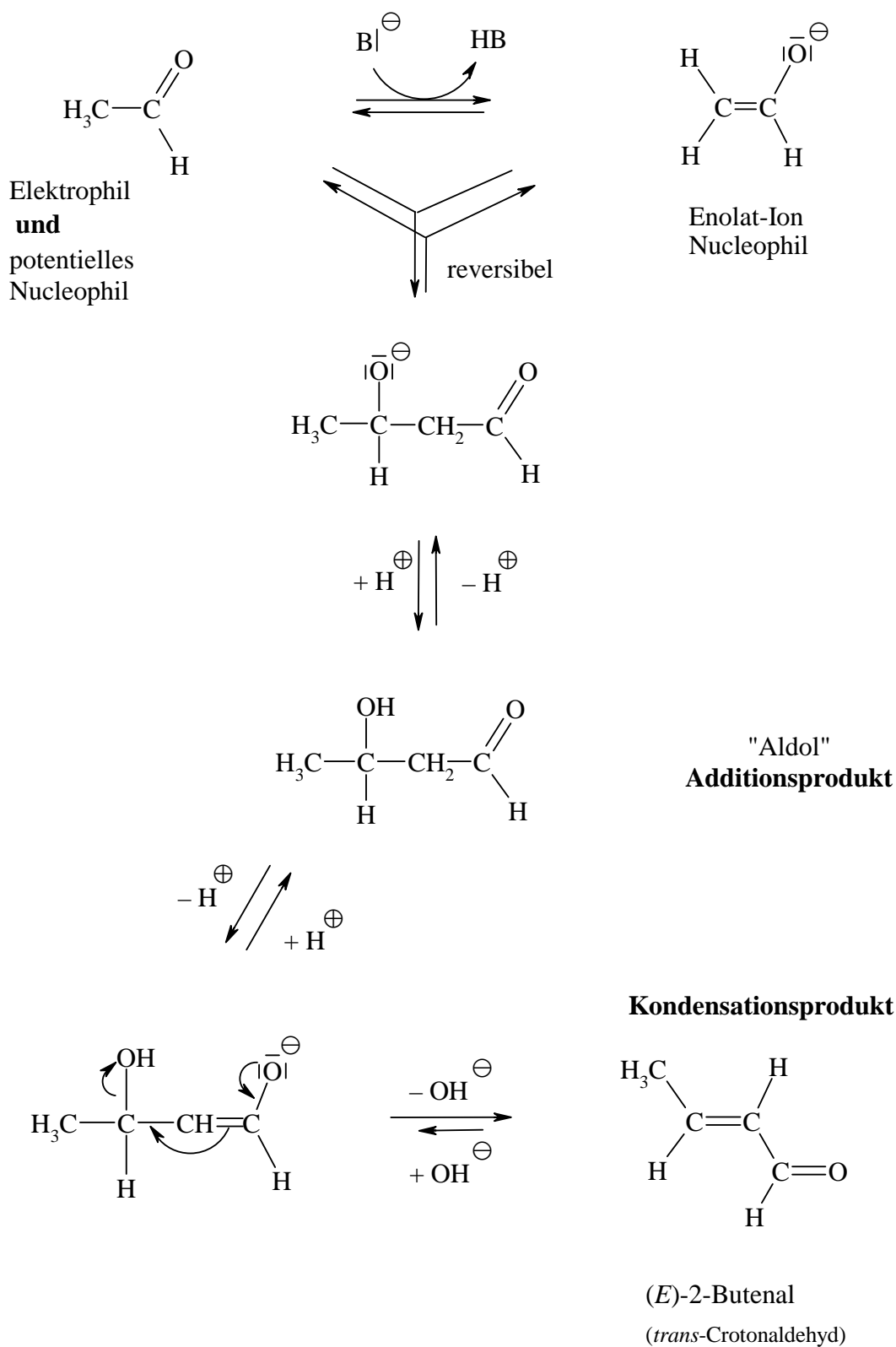


(*S*)-(+)-Muscon  
(Moschustier)



Zibeton  
(Zibetkatze)

## Basen-katalysierte Aldolreaktion von Acetaldehyd



## Aldoladditionen und Aldolkondensation

Elektrophil  
Carbonylverbindung

potentielles Nucleophil  
"Methylenkomponente"

