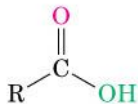
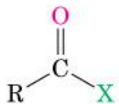




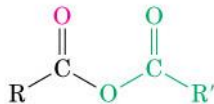
# DERIVATI DEGLI ACIDI CARBOSSILICI



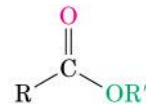
Acido carbossilico



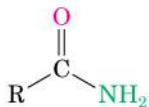
Alogenuro acilico  
(X = Cl, Br)



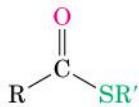
Anidride



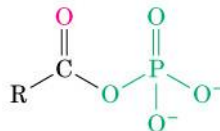
Estere



Ammide



Tioestere



Fosfato acilico

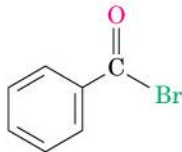




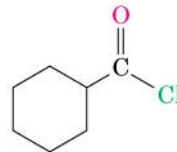
# ALOGENURI ACILICI



**Acetile cloruro**  
(dall'acido acetico)



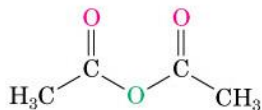
**Benzoile bromuro**  
(dall'acido benzoico)



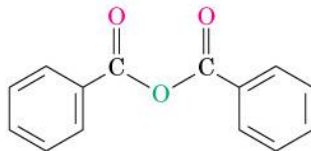
**Cicloesanocarbonile cloruro**  
(dall'acido cicloesancarbossilico)



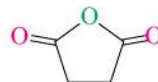
# ANIDRIDI



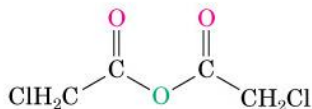
**Anidride acetica**



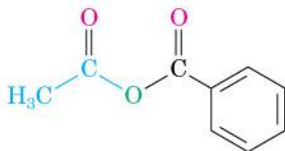
**Anidride benzoica**



**Anidride succinica**



**Anidride bis(cloroacetica)**



**Anidride acetico benzoica**



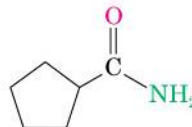
# AMMIDI



**Acetammide**  
(dall'acido acetico)



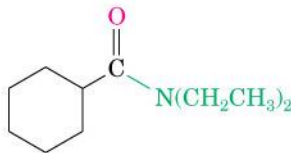
**Esanammide**  
(dall'acido esanoico)



**Ciclopentancarbossammide**  
(dall'acido ciclopentancarbossilico)



**N-Metilpropanammide**



**N,N-Dietilcicloesancarbossammide**



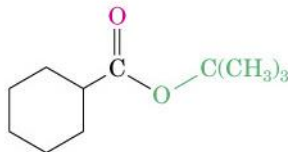
# ESTERI



**Etile acetato**  
(estere etilico  
dell'acido acetico)



**Dimetil malonato**  
(estere metilico  
dell'acido malonico)



**tert-Butile cicloesancarbossilato**  
(estere *tert*-butilico dell'acido  
cicloesancarbossilico)

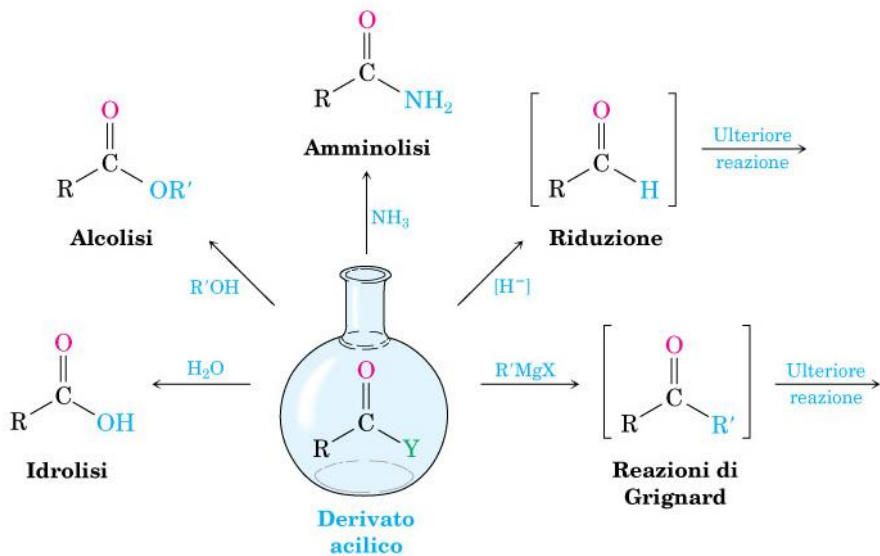
# NOMENCLATURA

Acido carbossilico	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{OH} \end{array}$	<i>acido -ico</i> (acido carbossilico)
Alogenuro acilico	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{X} \end{array}$	<i>-ile alogenuro</i> (-carbonile alogenuro)
Anidride	$\begin{array}{c} \text{O} \qquad \text{O} \\ \parallel \qquad \parallel \\ \text{R}-\text{C}-\text{O}-\text{C}-\text{R}' \end{array}$	<i>anidride</i>
Ammide	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{NH}_2 \end{array}$	<i>-amide</i> (-carbossammide)
Estere	$\begin{array}{c} \text{O} \\ \parallel \\ \text{R}-\text{C}-\text{OR}' \end{array}$	<i>-ato</i> (-carbossilato)



# REAZIONI DEI GRUPPI ACILICI

**FIGURA 21.3** Alcune reazioni generali dei derivati degli acidi carbossilici.



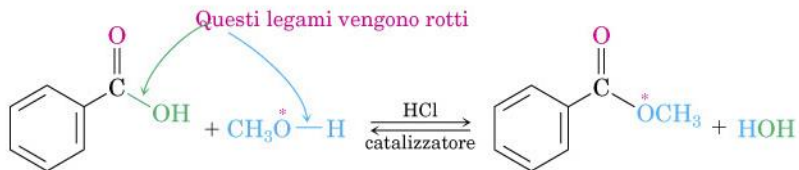
# REAZIONI DEGLI ACIDI CARBOSSILICI

**FIGURA 21.4** Alcune reazioni di sostituzione acilica degli acidi carbossilici.



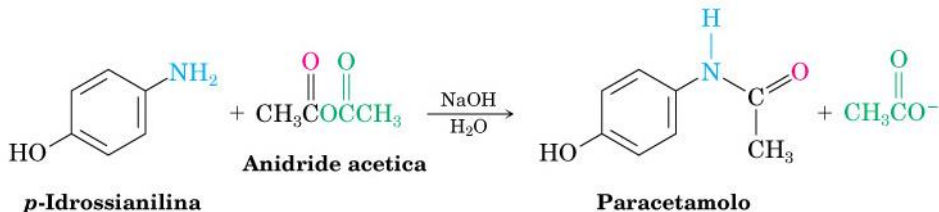
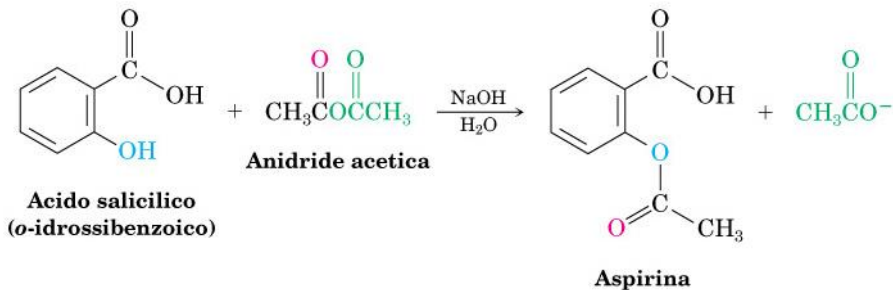


Acido carbossilico + alcol + cat. Acido = estere





## Reazioni di acilazione: acetilazione



## esteri



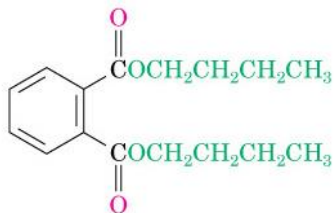
**Metil butanoato**  
(essenza di ananas)



**Isopentile acetato**  
(banana)



**Un grasso**  
(R = catene C<sub>11-17</sub>)

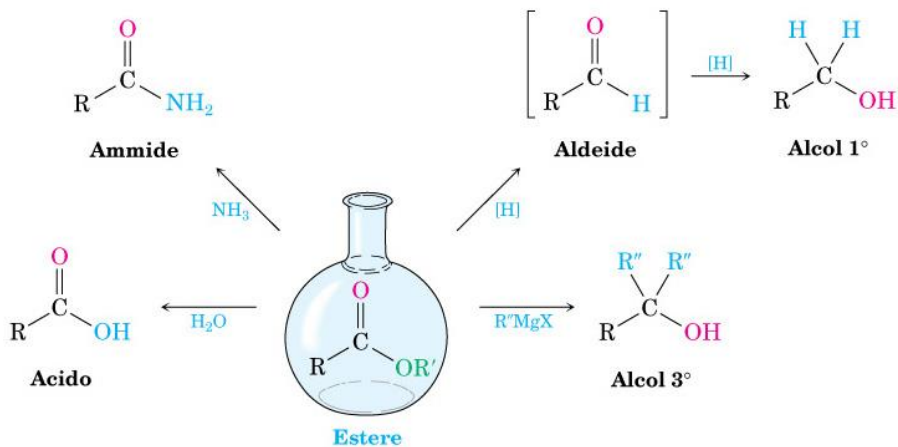


**Butile ftalato (plastificante)**



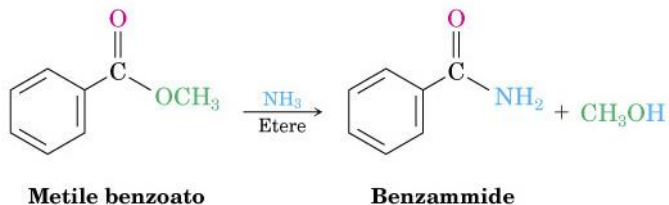
# Reazioni degli esteri

**FIGURA 21.8** Alcune reazioni degli esteri.





Estere + ammina = ammide





# polimeri

