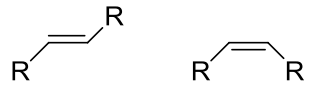


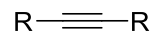
Wichtige Funktionelle Gruppen und Stoffklassen

Alkene (Olefine)



E- bzw. Z-Alkene
Diene u. Polyene

Alkine

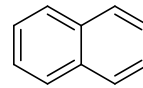


Aromaten



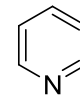
z.B. Benzol

...



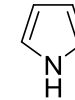
Naphtalin

Heteroaromaten



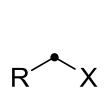
Pyridin

...



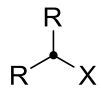
Pyrrol

Halogenalkane (Alkylhalogenide)

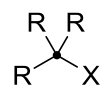


prim.

X = F, Cl, Br, I



sek.

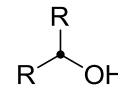


tert.

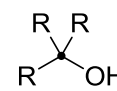
Alkohole



prim.

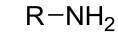


sek.

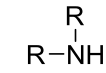


tert.

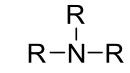
Amine



prim.

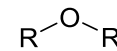


sek.

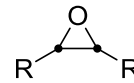


tert.

Ether



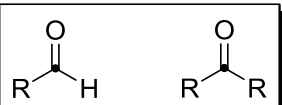
cycl. Ether



Epoxide

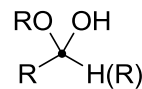


Carbonylverbindungen und Derivate

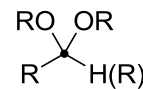


Aldehyd

Keton

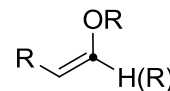


Halbacetal

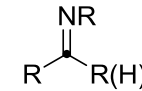


Acetal

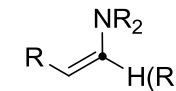
...



Enolether



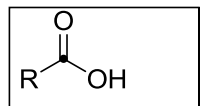
Imin



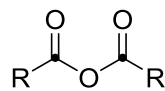
Enamin

...

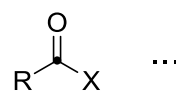
Carboxylverbindungen und Derivate



Carbonsäure

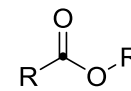


Carbonsäureanhydrid

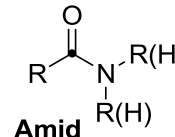


Carbonsäurehalogenid
X = Cl, Br

...



Ester



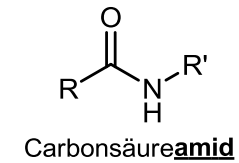
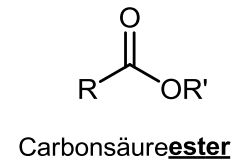
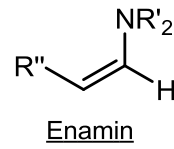
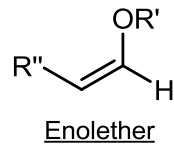
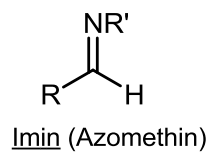
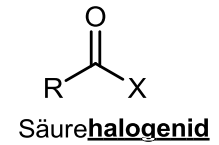
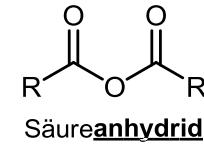
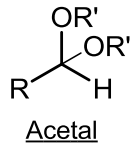
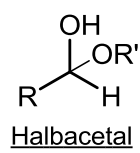
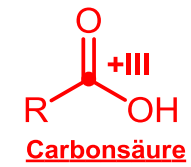
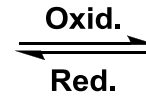
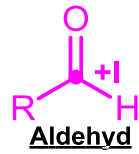
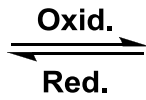
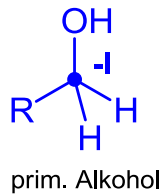
Amid



Nitril

...

Aldehyde, Ketone, Carbonsäuren und deren Derivate

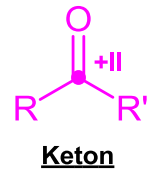
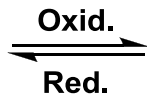
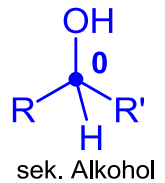


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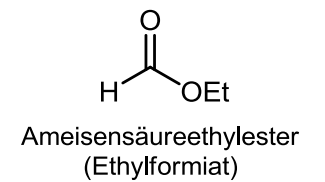
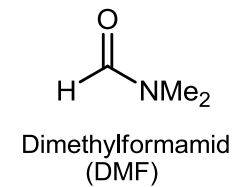
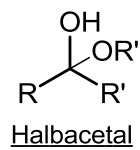
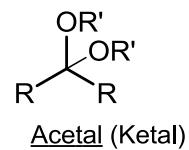
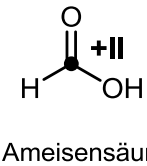
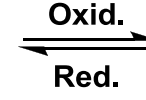
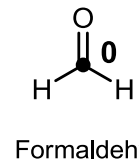
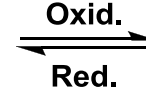
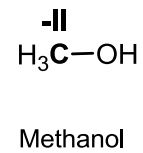
...

...

...



Beachte:



...

... analoge Derivate wie bei Aldehyden

Ausgewählte synthetische Querbeziehungen wichtiger funktioneller Gruppen

