

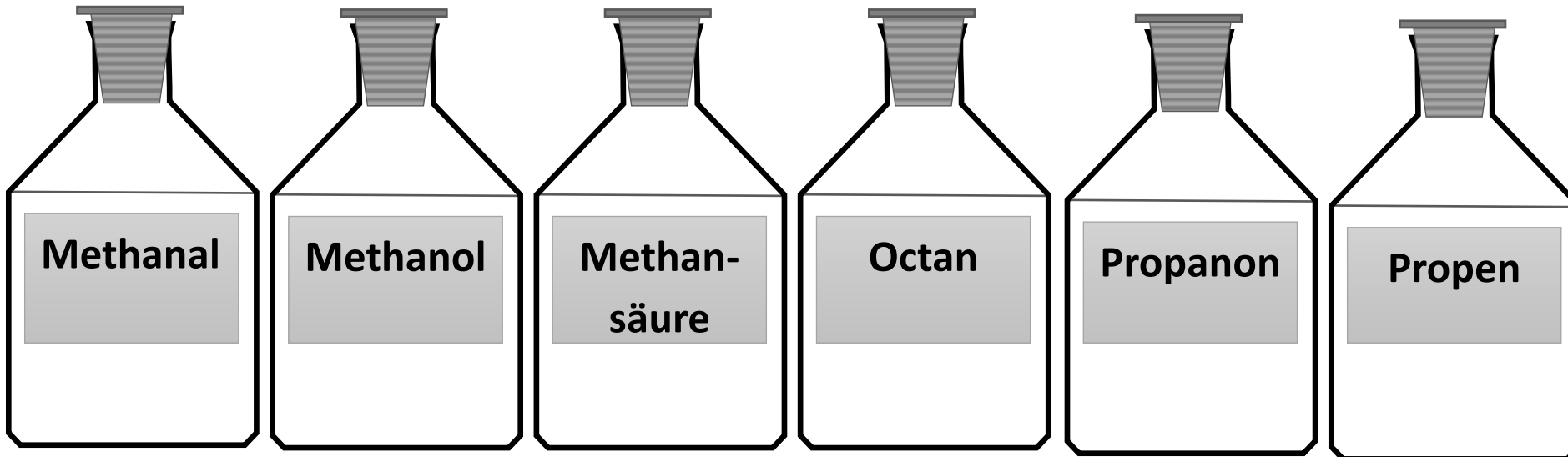
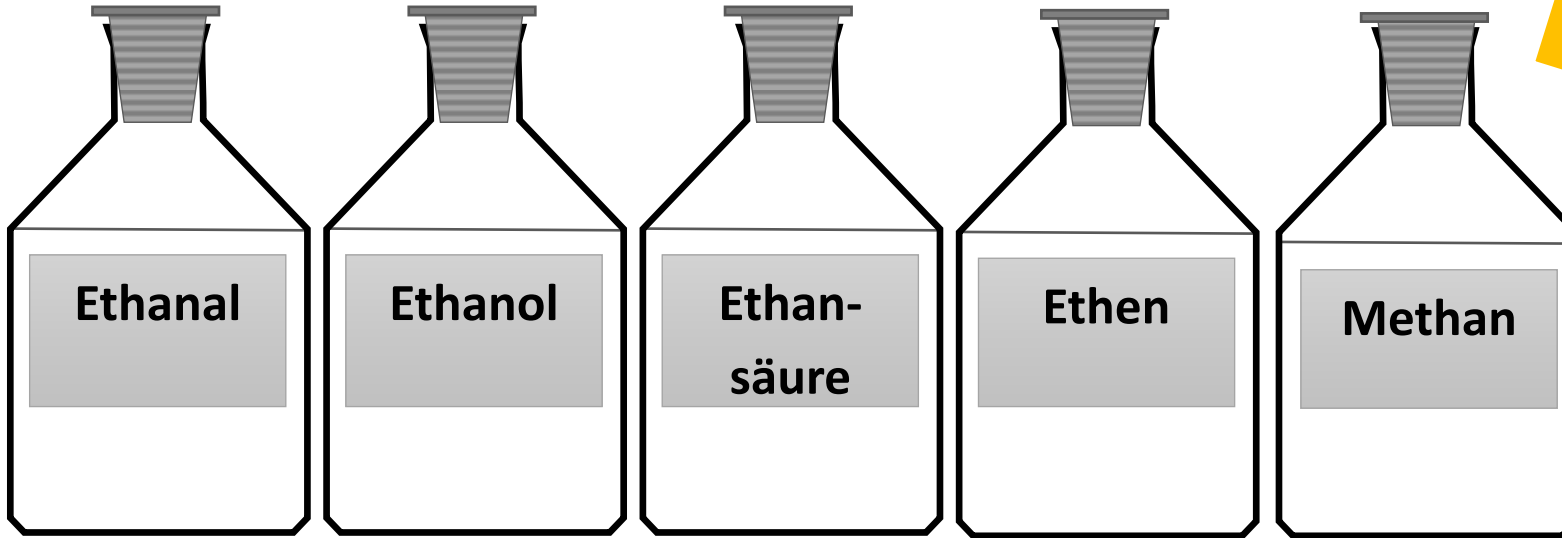


A man with short brown hair and a mustache, wearing a white lab coat over a white shirt and glasses, is looking intently at the camera. He is holding a round-bottom flask containing a vibrant blue liquid in his left hand. His right hand is raised to his face, adjusting his glasses. The background is a solid black, making the white lab coat and the blue liquid stand out. A white rectangular box with black text is superimposed over the center of the image.

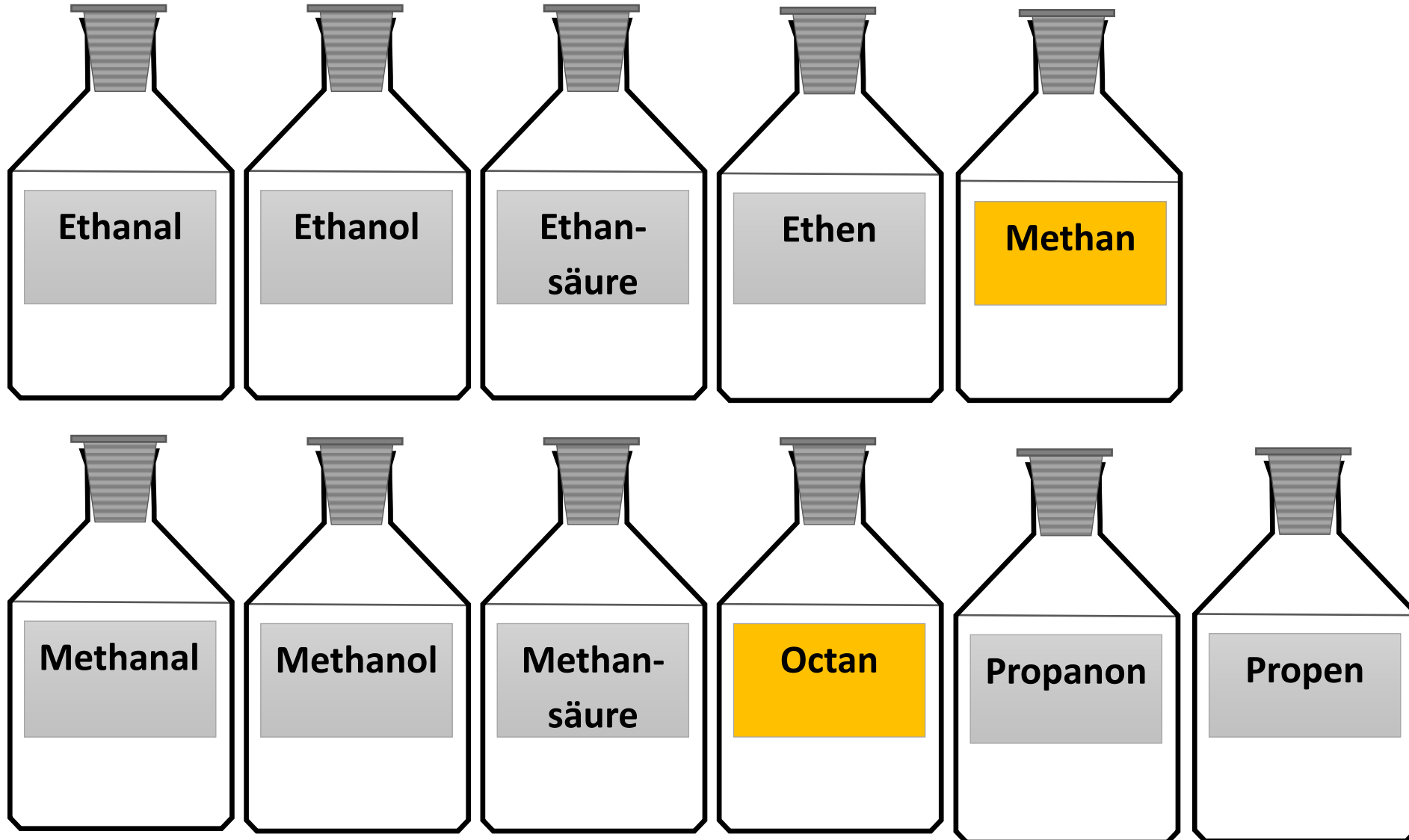
NEUER CHEMIELABORANT BRINGT
UN-ORDNUNG INS LABOR

Un-Ordnung

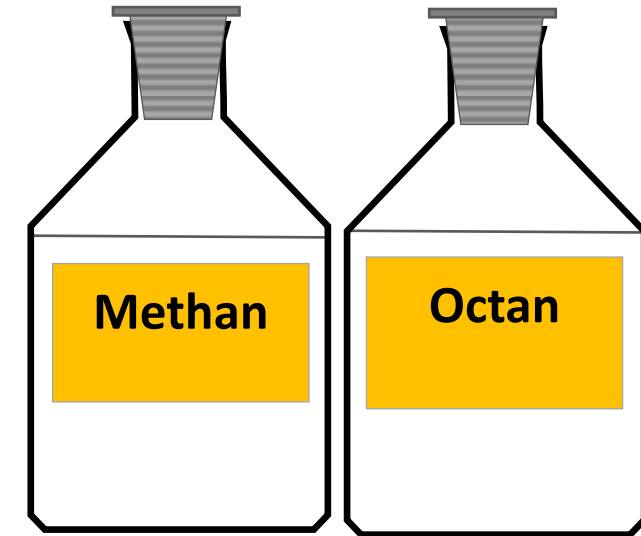
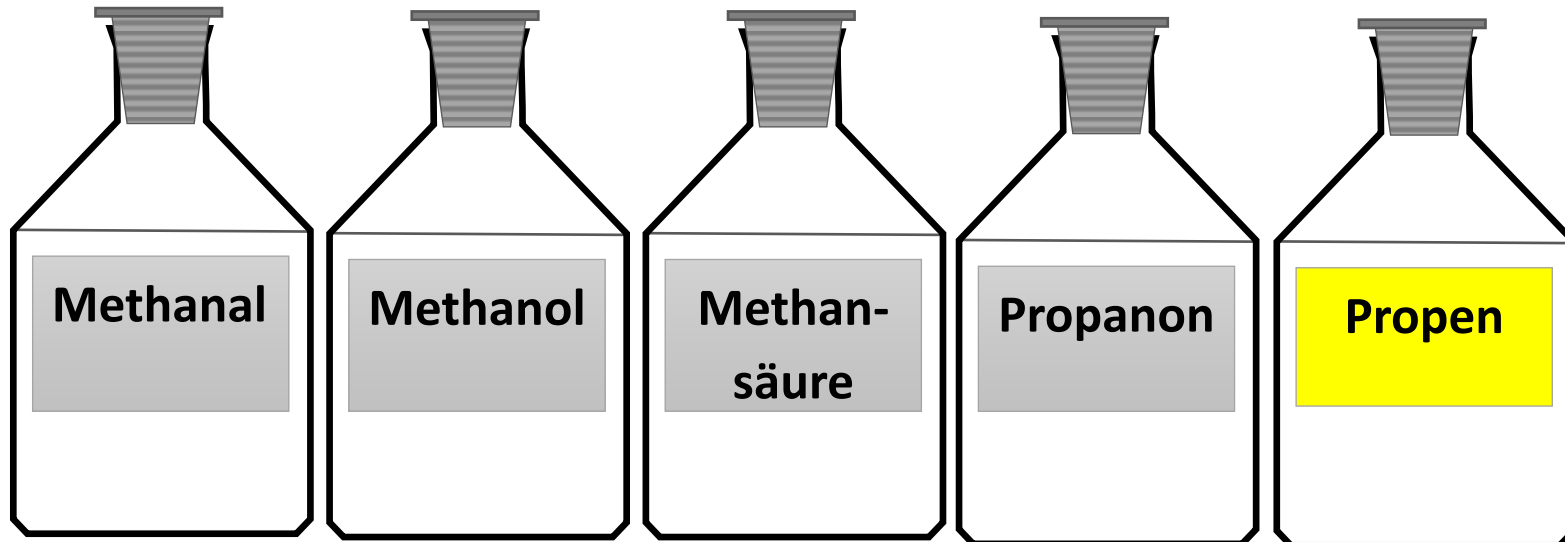
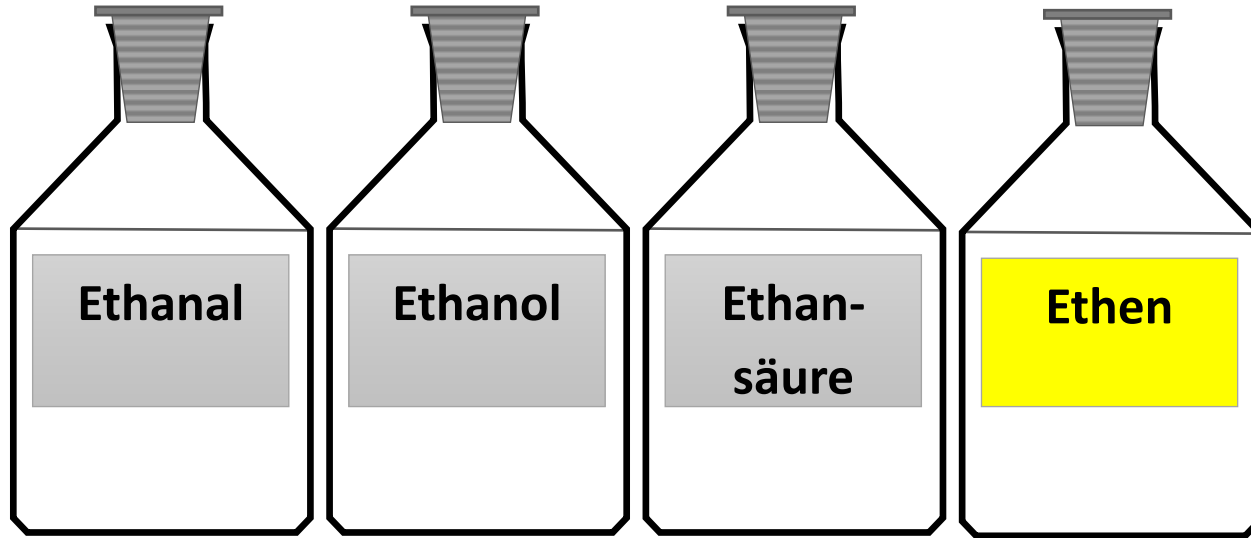
Nach funktionellen
Gruppen sortieren!



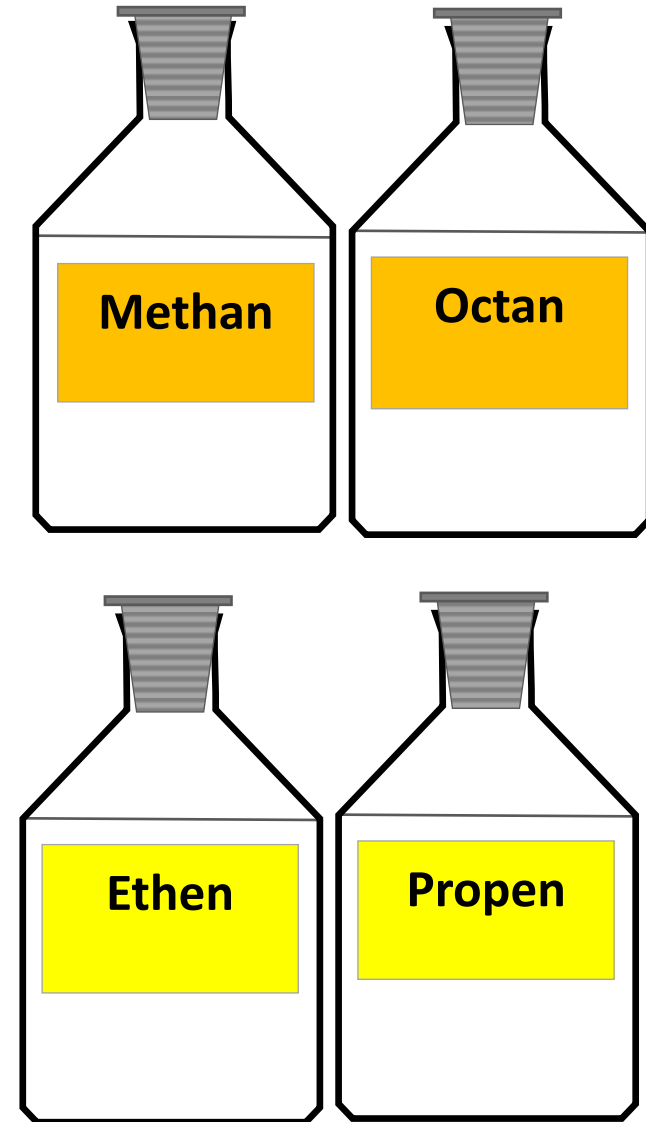
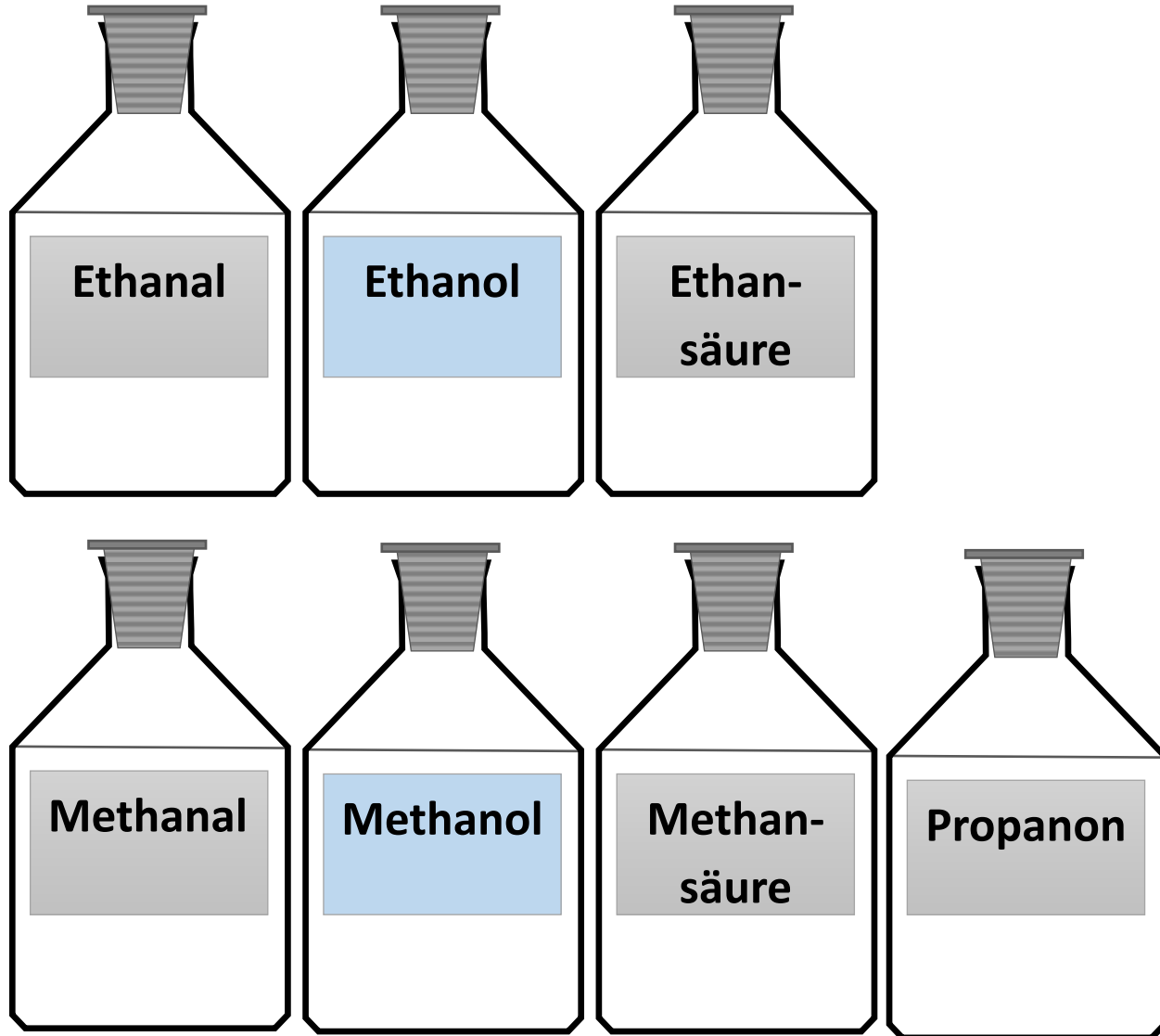
Alkane — Kohlenwasserstoffe nur Einfachbindungen



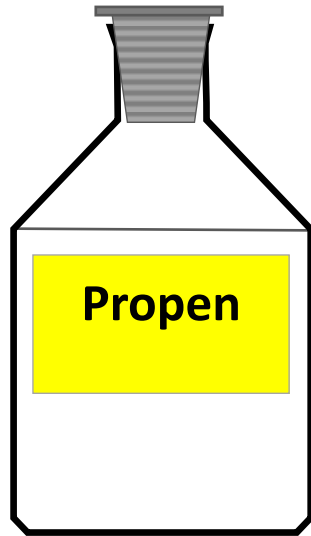
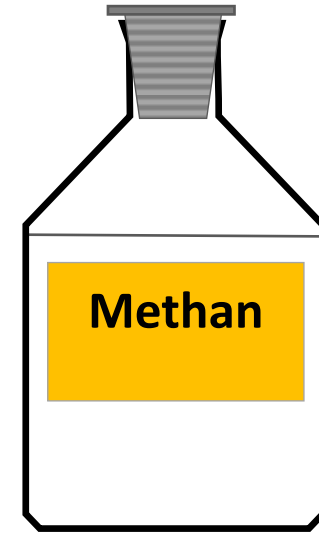
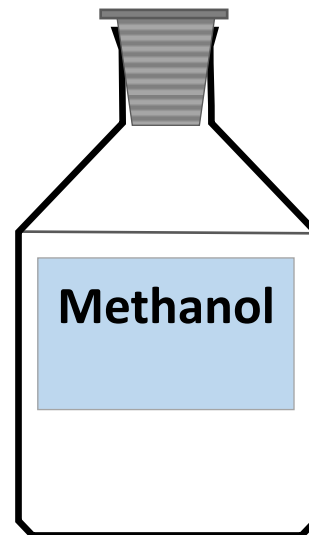
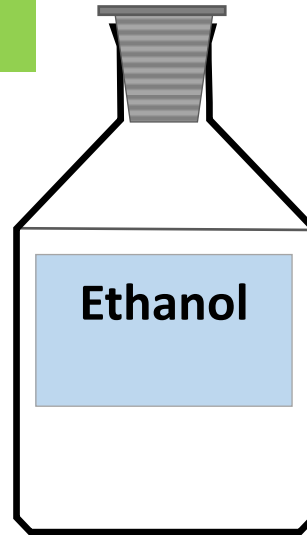
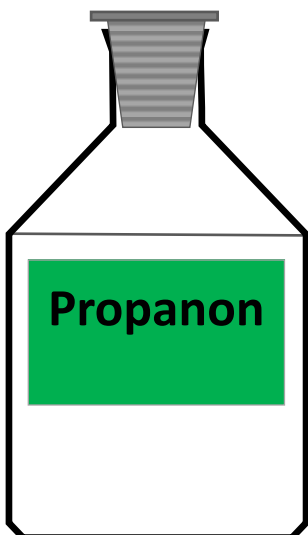
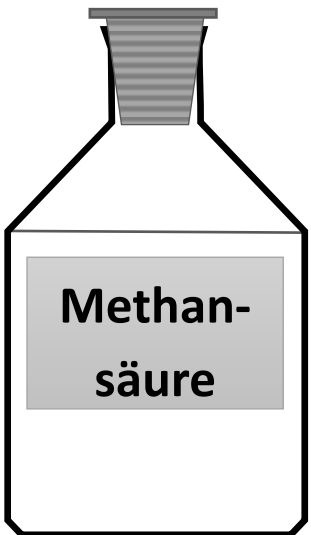
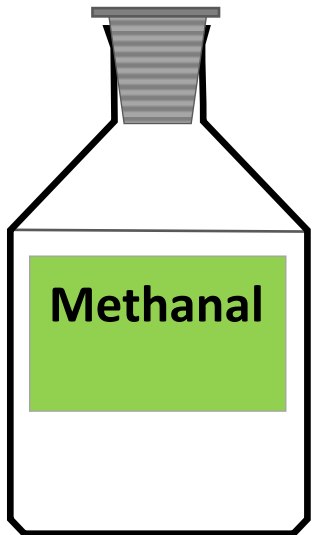
Alkene - Kohlenwasserstoffe mit Doppelbindung



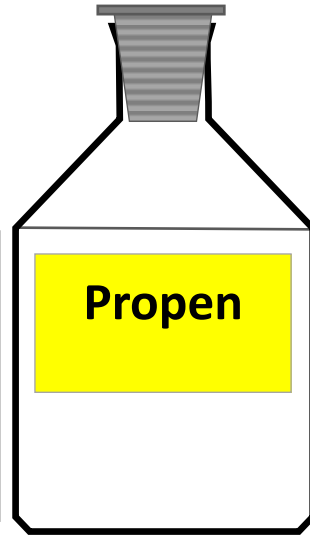
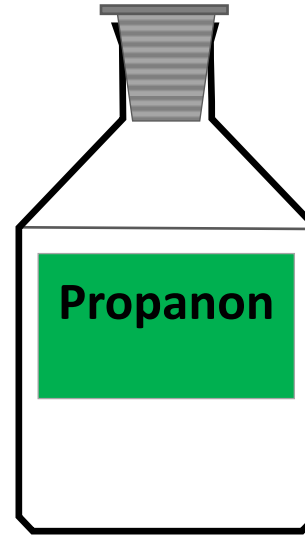
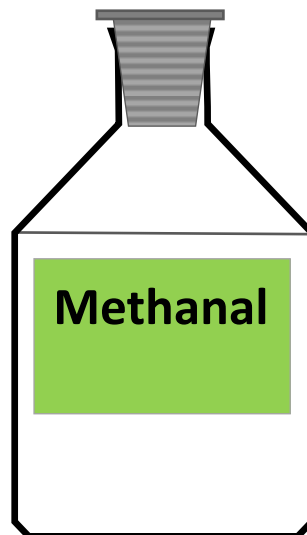
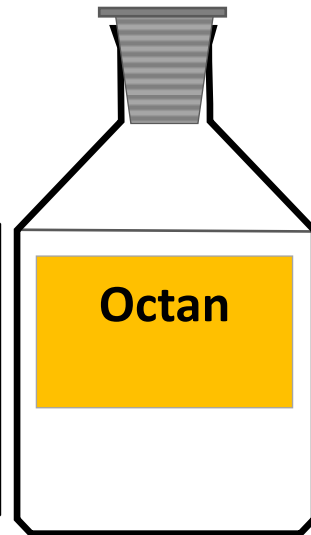
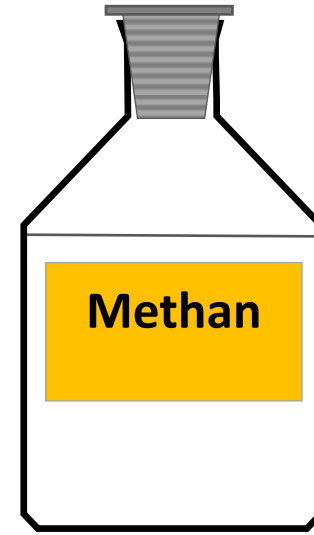
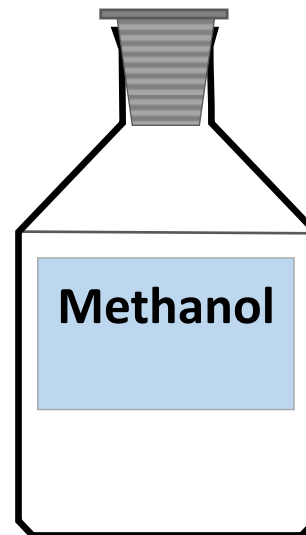
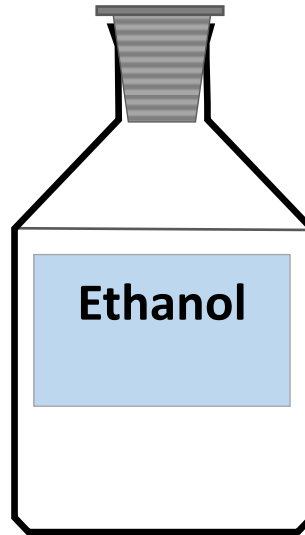
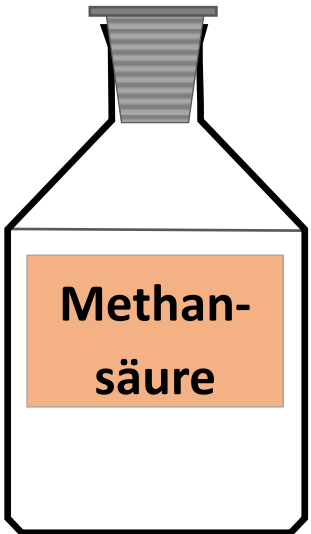
Alkanole – Hydroxy-Gruppe

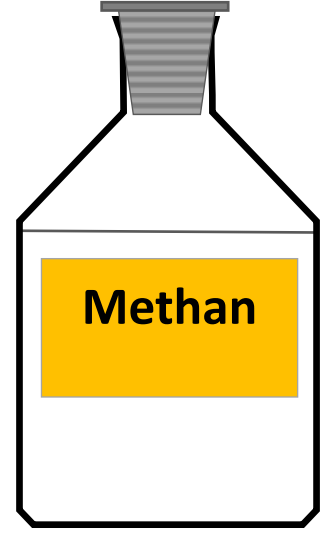
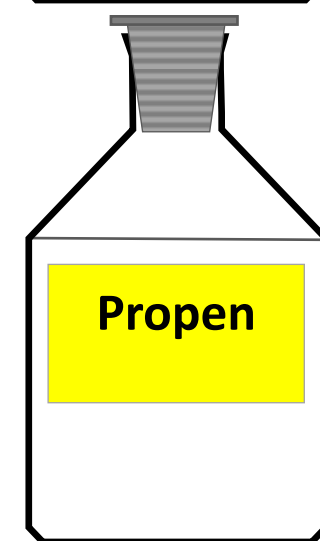
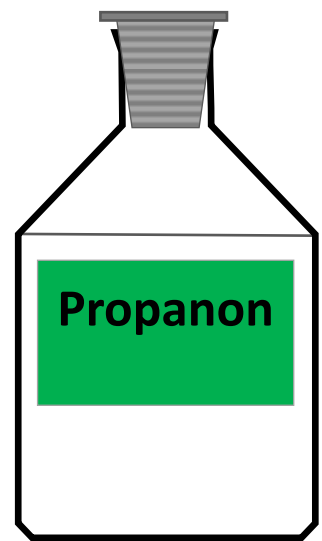
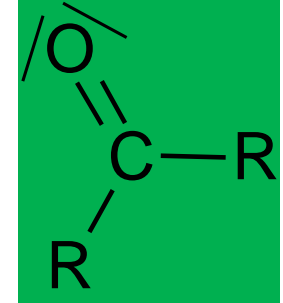
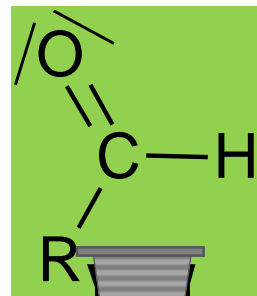
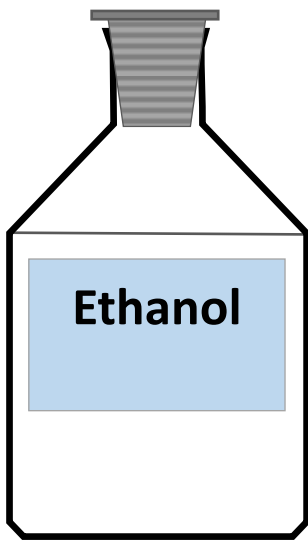
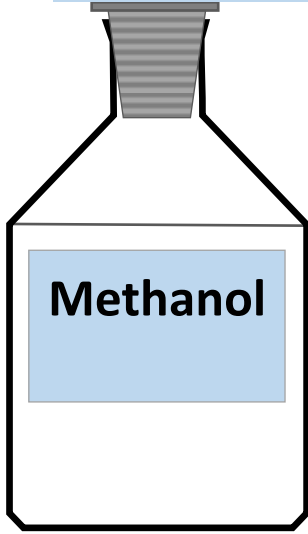
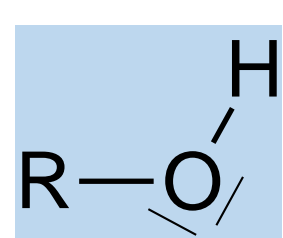
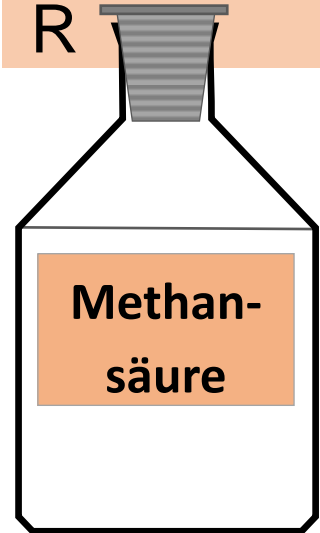
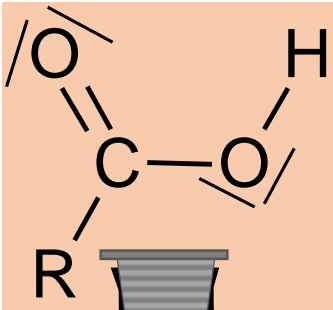


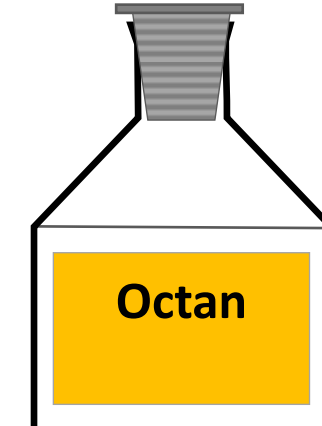
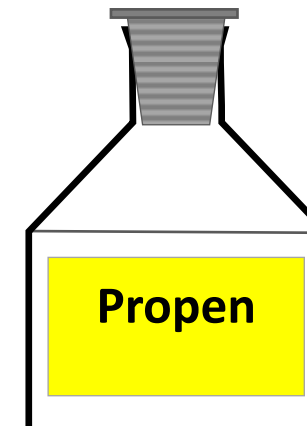
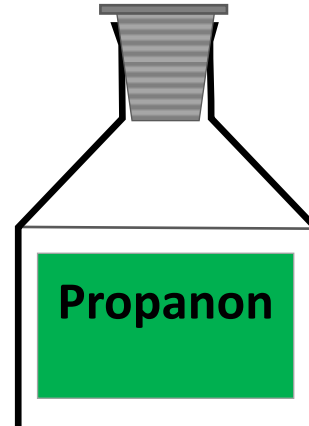
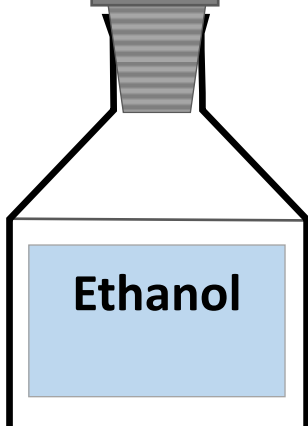
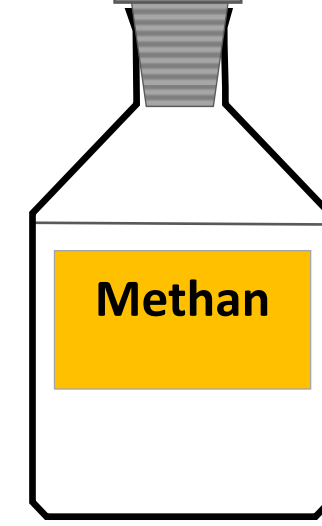
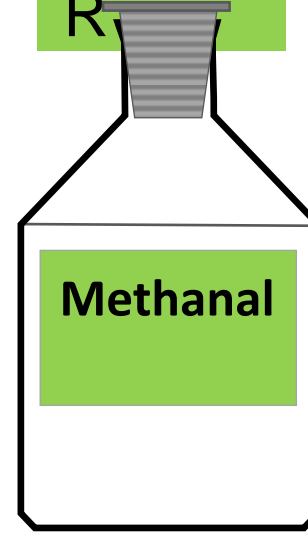
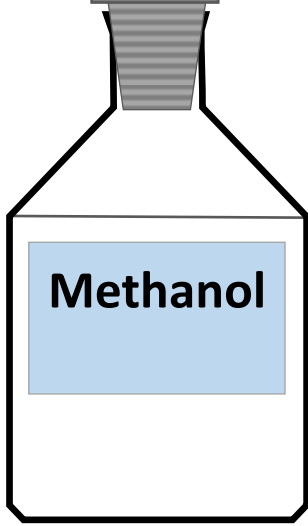
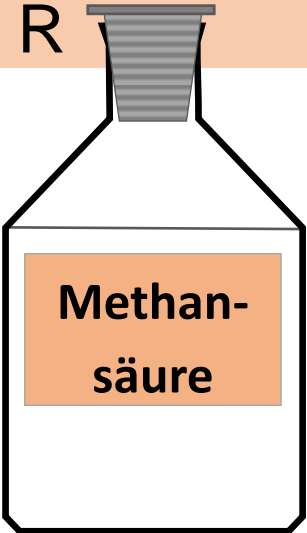
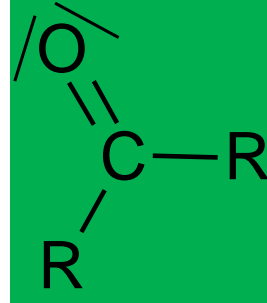
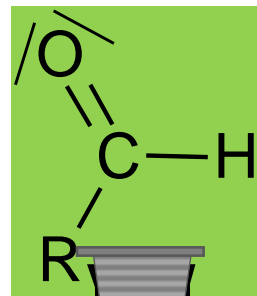
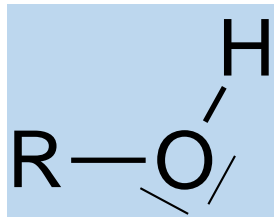
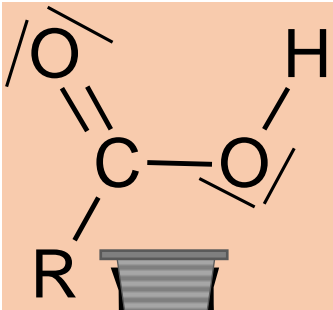
Alkanale und Alkanone – Carbonyl-Gruppe



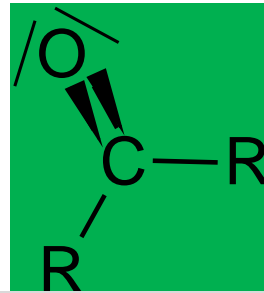
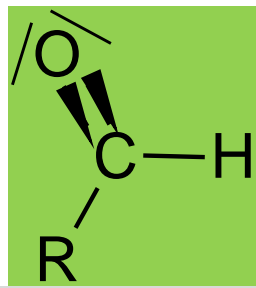
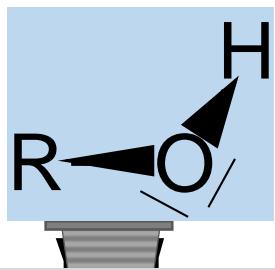
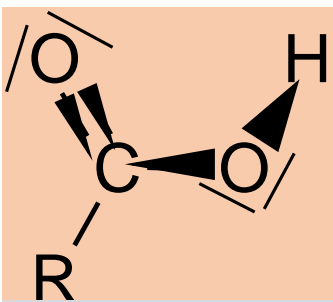
Alkansäuren – Carboxyl-Gruppe







Welche Moleküle sind unpolar/polar?



$\Delta EN \approx 1$

positiv polarisiertes
Wasserstoffatom

Methanal

Ethan-
säure

Ethanol

Ethanal

Propanon



$\Delta EN \approx 0$

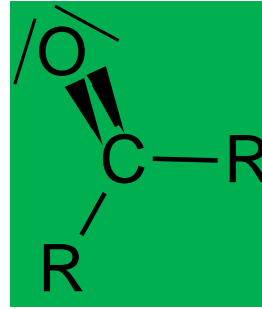
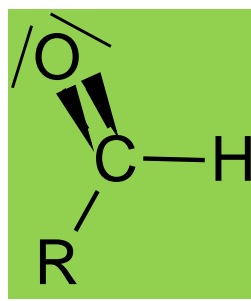
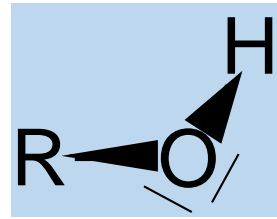
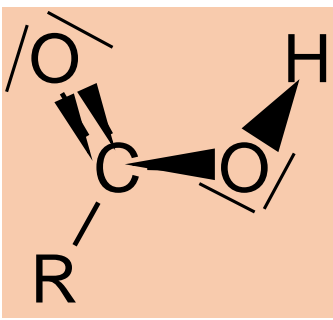
Ethen

Methan

Propen

Octan

Welche Moleküle sind unpolar/polar?



Alkansäuren

Alkanole

Alkanale und
Alkanone

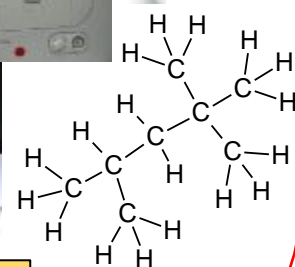
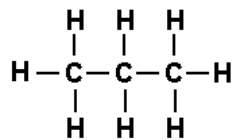
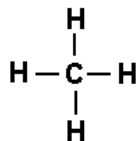
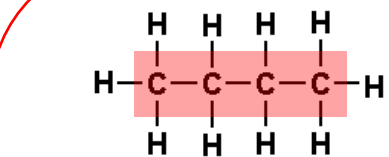
Alkane und Alkene

Ausbildung von
Wasserstoffbrücken +

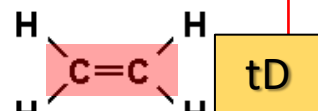
Wechselwirkungen zwischen permanenten
Dipolen +

Wechselwirkungen zwischen temporären Dipolen

Wechselwirkungen zwischen den Molekülen

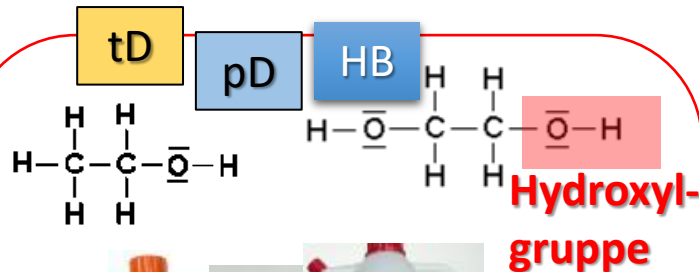


Alkane tD

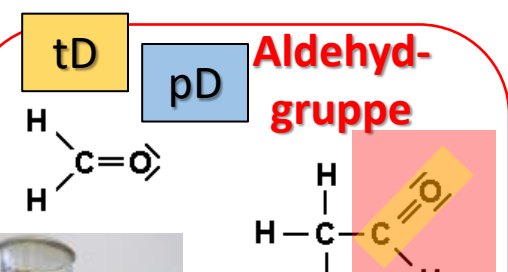


Alkene
C-C-Doppel-
bindung

OC

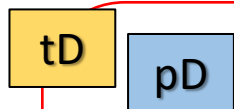


Alkohole/Alkanole

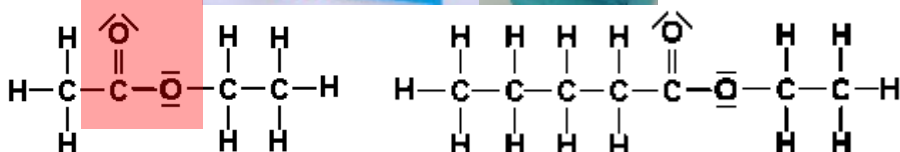


Carbonyl-
gruppe

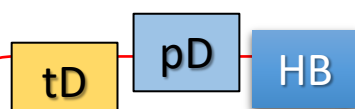
Aldehyde/Alkanale



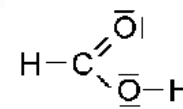
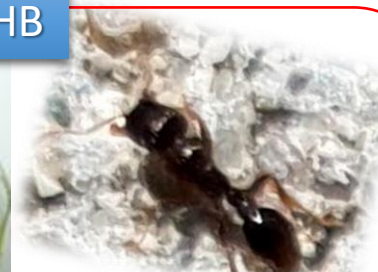
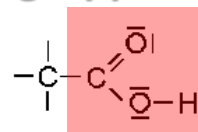
Ester-
gruppe



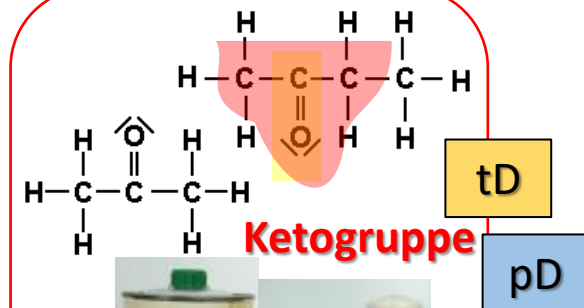
Ester/Alkansäurealkylester



Carboxyl-
gruppe



Carbonsäuren/Alkansäuren



Ketone/Alkanone