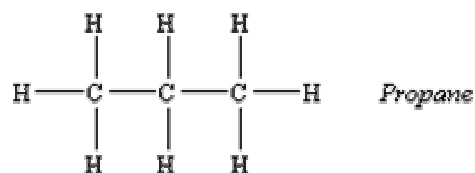


Hydrocarbons – acyclic or cyclic

# of C	1	2	3	4	5	6
	Meth-	Eth-	Prop-	But-	Pent-	Hex-

Alkanes – saturated, branched or unbranched – C_nH_{2n+2}

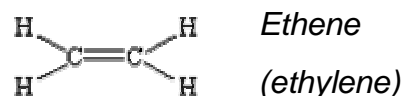


<= butane: gaseous at 25°C

>= pentane: liquid at 25°C

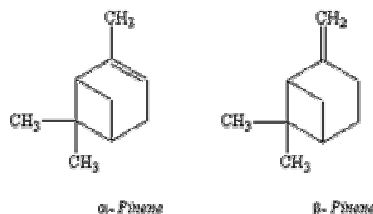
Paraffins: saturated hydrocarbons (acyclic or cyclic)

Alkenes – one or more C=C double bond, unsaturated – C_nH_{2n}



Olefins: containing 1 or more C=C (acyclic or cyclic)

Dienes: containing 2 C=C (e.g. isoprene)

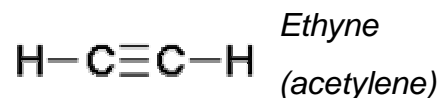


Terpenes: consisting of 1 or more isoprene (C_5) back bone

- monoterpene: 2 C_5 units

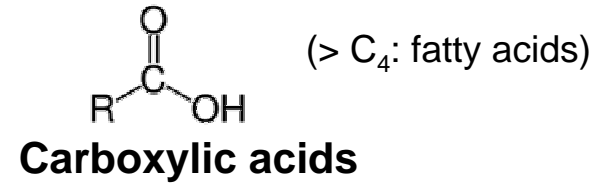
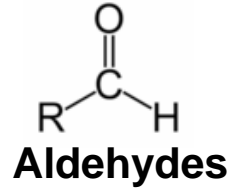
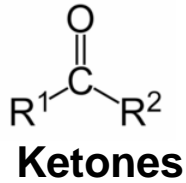
- sesquiterpene: 3 C_5 units

Alkynes – one or more C≡C triple bond, unsaturated – C_nH_{2n-2}

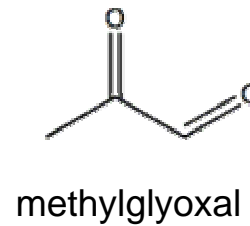
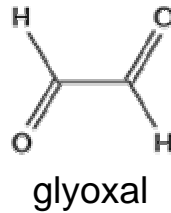


Oxygenated organic compounds

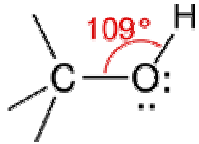
Carbonyls – contains one or more C=O



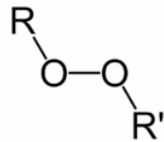
- Dicarboxyls



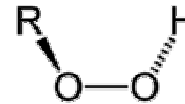
Alcohols



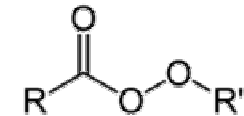
Peroxides



Hydroperoxides

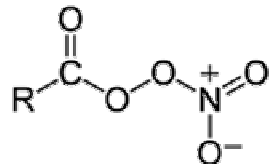


Peresters



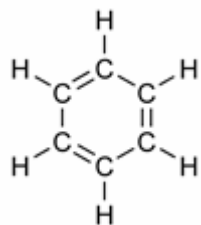
PANs

(Peroxyacyl nitrates)

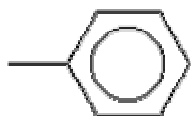


Aromatics

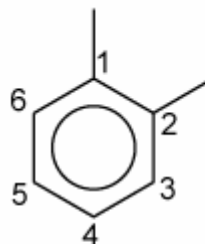
Alkylbenzenes – one or more alkyl group on benzene ring



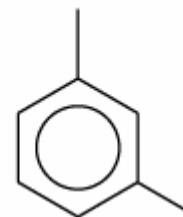
benzene



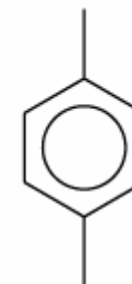
Methylbenzene
(toluene)



1,2-dimethylbenzene
(*ortho*-xylene)



1,3-dimethylbenzene
(*meta*-xylene)

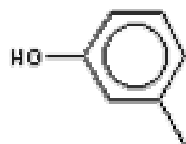


1,4-dimethylbenzene
(*para*-xylene)

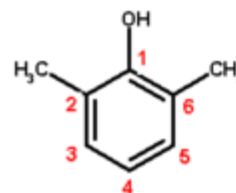
Benzene derivatives – one or more substituents to benzene core



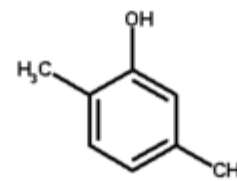
Phenol
(1 hydroxyl group)



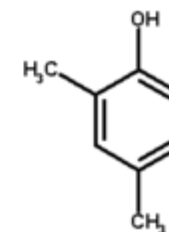
Cresol
(1 hydroxyl group +
1 alkyl group)



2,6-dimethylphenol



2,5-dimethylphenol



2,4-dimethylphenol

Xylenol
(1 hydroxyl group + 2 alkyl group)