
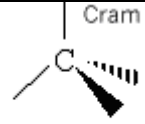

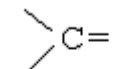
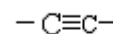

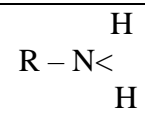


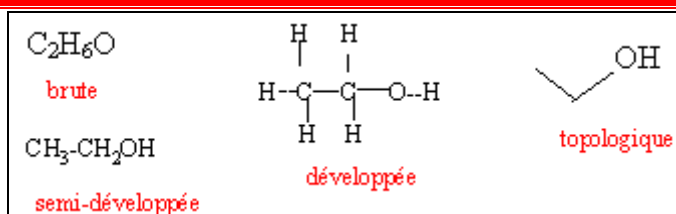


Géométrie des liaisons

	Types de liaisons	exemple	géométrie
CARBONE	4 liaisons simples	Les alcanes 	 carbone tétragonal tétraire
	2 liaisons simples 1 double	Les alcènes 	 carbone trigonal structure plane
	1 liaison simple 1 triple	Acétylène - C≡C -	 carbone digonal structure linéaire
HYDROGENE	1 liaison simple	- H	- H
OXYGENE	2 liaisons simples	-O- droit coudé	 droit coudé
	1 double	O = O	>C = O structure linéaire
AZOTE	4 liaisons simples	R—NH ₃ ⁺	
	3 liaisons simples	R—NH ₂	 tétraire
	1 liaison simple 1 double	-N=	
	1 liaison triple	N≡	

Formules :

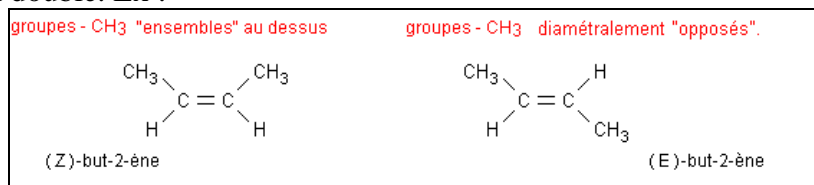


Hydrocarbures :

Alcane	Nb atomes C	radical	f. topologique	f. semidéveloppée
Méthane	1	meth	.	CH ₄
éthane	2	eth	—	CH ₃ -CH ₃
propane	3	prop	^	CH ₃ -CH ₂ -CH ₃
butane	4	but	∩	CH ₃ -CH ₂ -CH ₂ -CH ₃
pentane	5	pent	^^	CH ₃ -(CH ₂) ₃ -CH ₃
hexane	6	hex	∩∩	CH ₃ -(CH ₂) ₄ -CH ₃
		hept, oct...		CH ₃ -(CH ₂) _n -CH ₃

Alcènes :

Contiennent une liaison double. Ex :

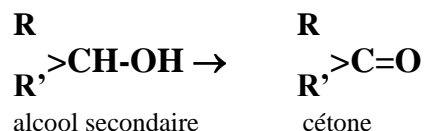
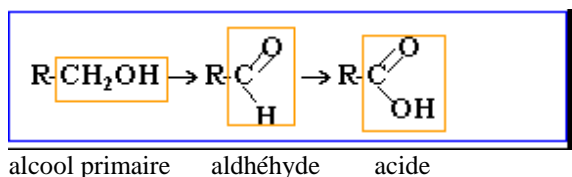


Familles et groupes caractéristiques :

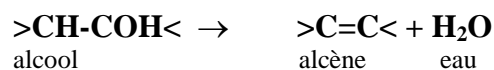
famille	groupe	Nom du groupe	suffixe	formules
Composés halogénés	-X où X={Cl,Br,I}	halogéno		R - X
Alcools	-OH	hydroxyle	-ol	Primaire R-CH ₂ OH secondaire R-CHOH-R' tertiaire R R'>COH-R ''
Composés carbonylés	>C=O	carbonyle		
aldéhydes	-CHO		-al	
cétones	>C=O		-one	
esters	-CO ₂ -		-oate	
Acides carboxyliques	-COOH	carboxylique	-oïque	
Amines	-NH ₂ >NH ou ≥N	amino	-amine	Primaire R-NCH ₂ secondaire R-NH-R' tertiaire R R'>N-R ''
Amides	>N>C=O	amide	-amide	

Principales réactions :

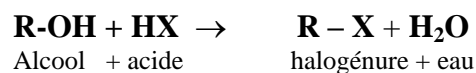
Oxydation



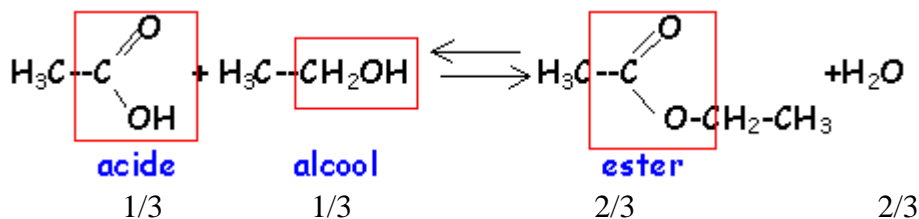
Déhydratation



Halogénéation



Estérification



Saponification

La réaction de saponification (ester + soude) est lente mais totale.

elle conduit à un alcool et à un carboxylate de sodium

