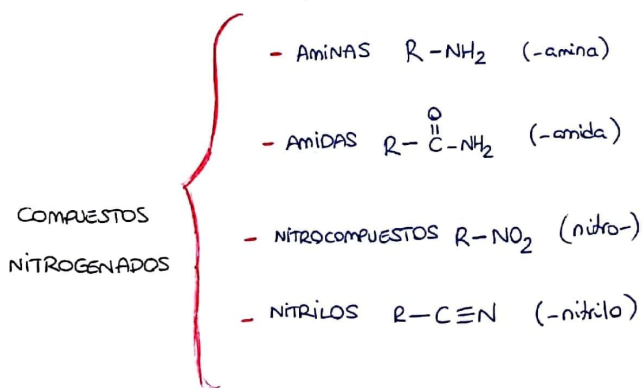
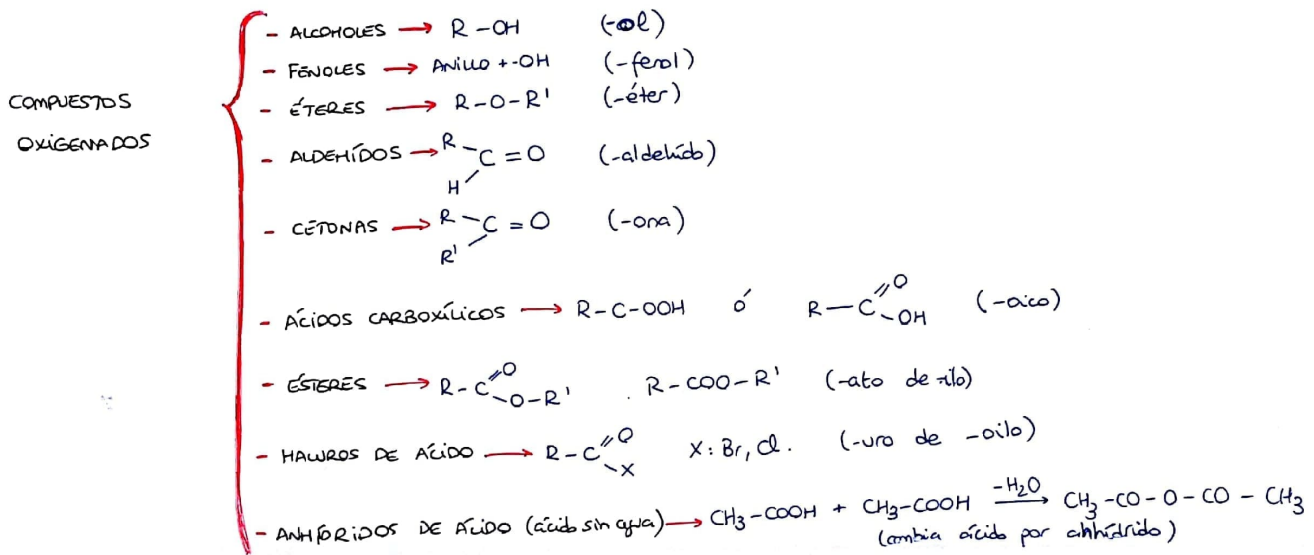


QUÍMICA ORGÁNICA

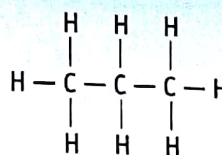


FUNCIONES HIDROGENADAS: HIDROCARBUROS

SATURADOS

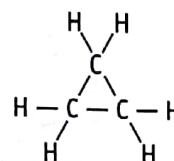
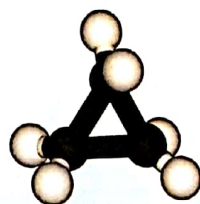
Alcanos
 $R - CH_2 - R'$

De cadena
abierta



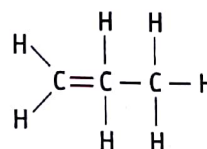
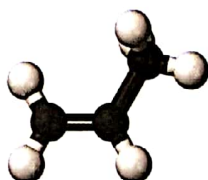
Pref.(n:C)ano
Propano

De cadena
cerrada



CicloPref.(n:C)ano
Ciclopropano

De cadena
abierta

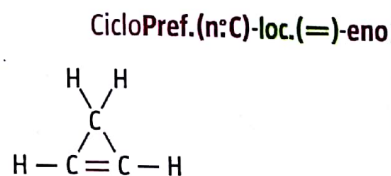
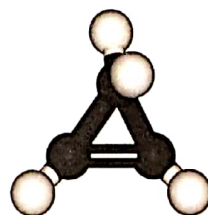


Pref.(n:C)-loc.(=)-eno
Prop-1-eno

INSATURADOS

Alquenos
 $R - CH = CH - R'$

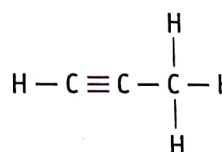
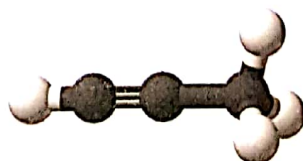
De cadena
cerrada



CicloPref.(n:C)-loc.(=)-eno

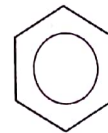
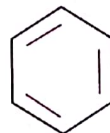
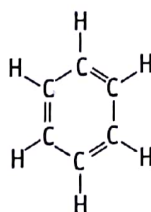
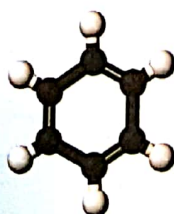
Cicloprop-1-eno

Alquinos
 $R - C \equiv C - R'$

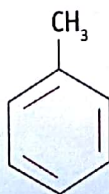
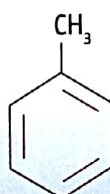


Pref.(n:C)-loc.(=)-ino
Prop-1-ino

AROMÁTICOS



Benceno

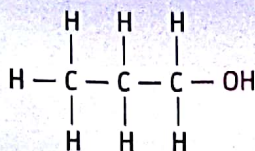
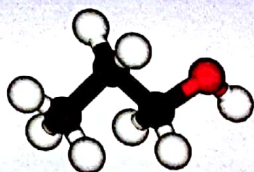


Pref.(n:C_R)ilbenceno
Metilbenceno
o Tolueno

Química del carbono

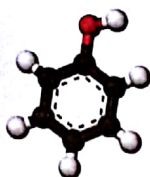
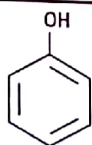
FUNCIONES OXIGENADAS

ALCOHOLES
 $R-CH_2OH$

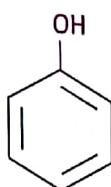


Nombre(HC)-loc.(-OH)-ol
Propan-1-ol

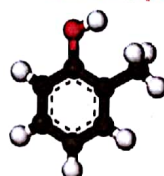
FENOLES



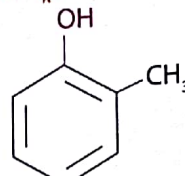
Fenol



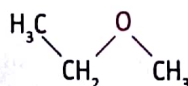
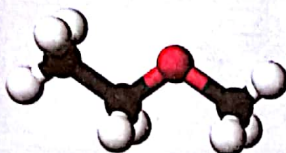
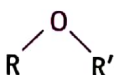
loc.(CR)-pref.(n: C_R)ilfenol



2-metilfenol

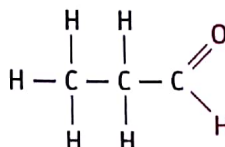
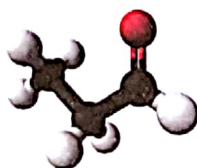


ÉTERES



Pref.(n: C_R)oxipref.(n: CR)ano
Metoxietano

ALDEHÍDOS
 $R-COH$

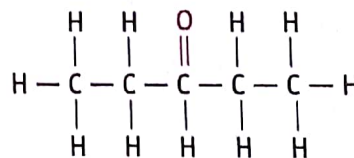


Nombre(HC)al
Propanal

CETONAS
 $R-CO-R'$

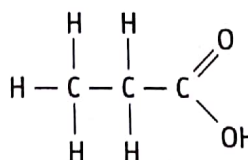
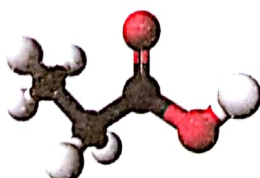


Nombre(HC)-loc.(-CO-)-ona



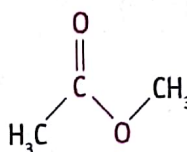
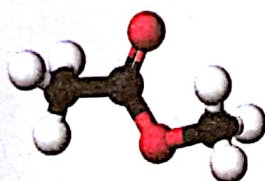
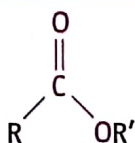
Pentan-3-ona

ÁCIDOS CARBOXÍLICOS
 $R-COOH$



Ácido nombre(HC)oico
Ácido propanoico

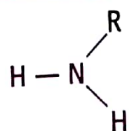
ÉSTERES



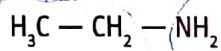
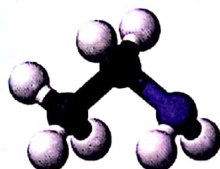
Pref.(n: C)ato de pref.(n: C_R)ilo
Etanoato de metilo

FUNCIONES NITROGENADAS. I. AMINAS

AMINAS PRIMARIAS

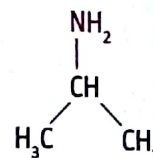
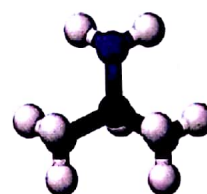


Nombre(HC)amina
o pref.(n°C_R)ilamina



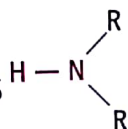
Etanamina o etilamina

Nombre(HC)-loc.(—NH₂—)-amina o
loc.(C_R)-pref.(n°C_R)ilpref.(n°C_R)ilamina

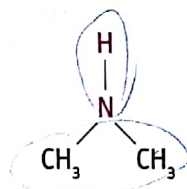
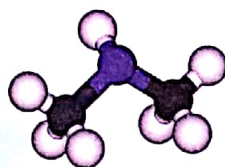


Propan-2-amina o 1-metiletilamina

AMINAS SECUNDARIAS

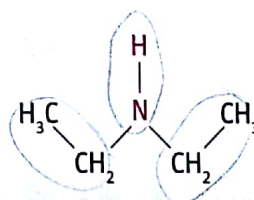
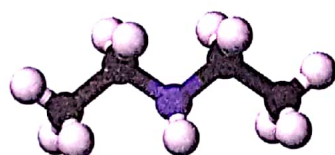


Pref.(n°C_R)ilnombre(C_R)-loc.(—NH₂—)-amina o
pref.(n°C_R)ilpref.(n°C_R)ilamina



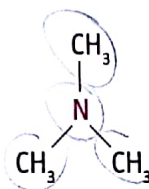
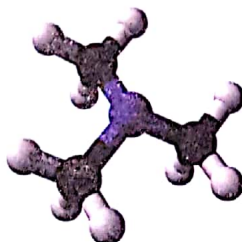
Metilmetanamina o
metilmetilamina o dimetilamina

N-pref.(n°C_R)ilnombre(C_R)-loc.(—NH—)-amina o
N-pref.(n°C_R)ilpref.(n°C_R)ilamina



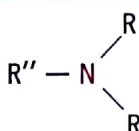
N-etiletan-1-amina o
N-etiletilamina o
dietilamina

Pref.(n°C_R)ilpref.(n°C_R)ilnombre(C_R)amina o
pref.(n°C_R)ilpref.(n°C_R)ilpref.(n°C_R)ilamina

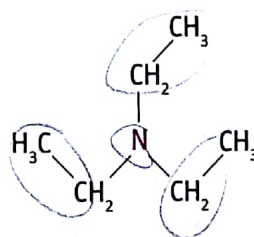
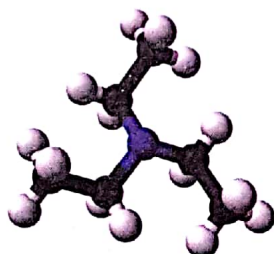


Metilmetilmetanamina o
metilmetilmetilamina o
trimetilamina

AMINAS TERCIARIAS



N-pref.(n°C_R)il-N-pref.(n°C_{R''})ilnombre(C_R)-loc.(—N—)-amina o
N-pref.(n°C_R)il-N-pref.(n°C_{R''})ilpref.(n°C_R)ilamina

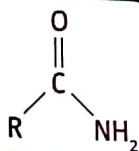


N-etil-N-etiletan-1-amina o
N-etil-N-etiletilamina o
triethylamina

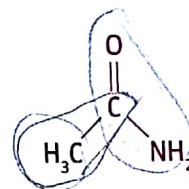
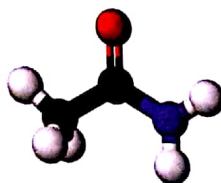
Química del carbono

FUNCIONES NITROGENADAS. II. AMIDAS

AMIDAS
PRIMARIAS



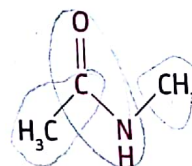
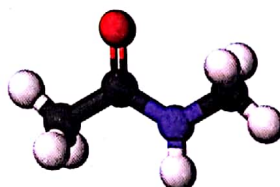
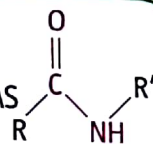
Nombre(HC)amida



Etanamida o acetamida

N-pref.(n: C_R)il nombre(n: C_R)amida

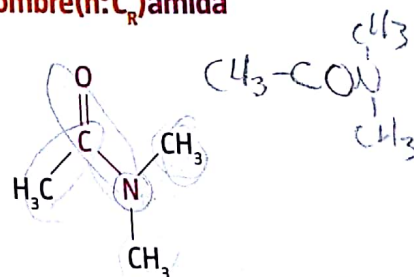
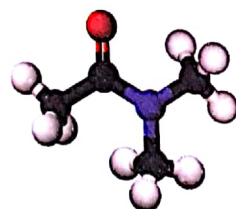
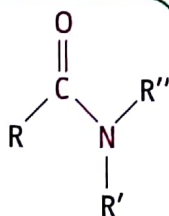
AMIDAS
SECUNDARIAS



N-metiletanamida

N-pref.(n: C_R)il-*N*-pref.(n: C_{R'})il nombre(n: C_R)amida

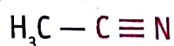
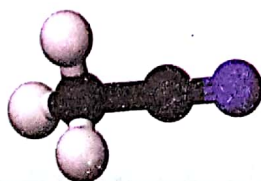
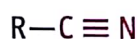
AMIDAS
TERCIARIAS



N-metil-*N*-metiletanamida o dimetiletanamida

FUNCIONES NITROGENADAS. III. NITRILOS

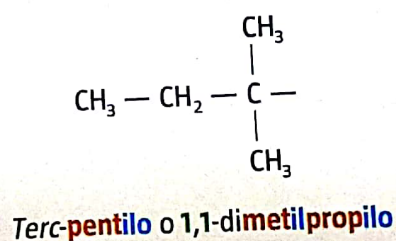
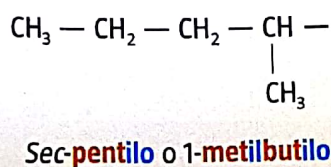
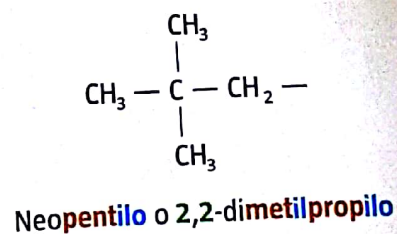
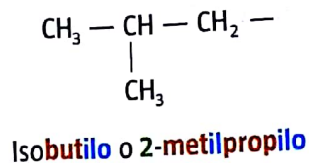
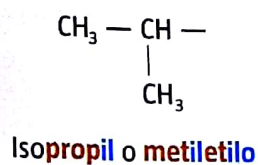
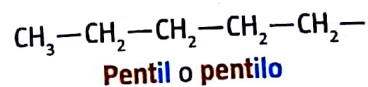
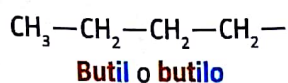
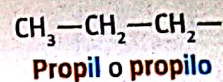
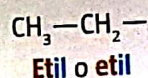
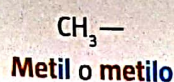
NITRILOS



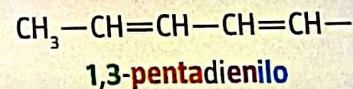
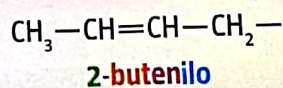
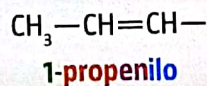
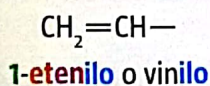
Pref.(n: C)ilnitrilo
Etilnitrilo o acetonitrilo

NOMENCLATURA DE RADICALES

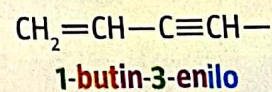
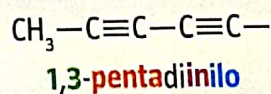
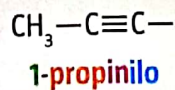
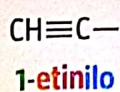
ALCANOS



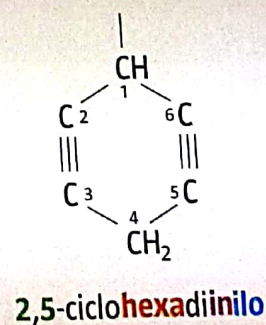
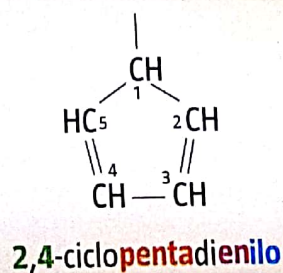
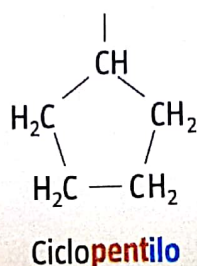
ALQUENOS



ALQUINOS

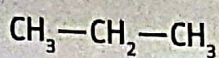


CÍCLICOS

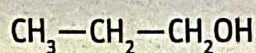


Química del carbono

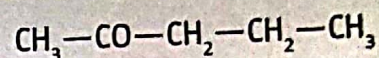
COMPUESTOS CON UN SOLO GRUPO FUNCIONAL



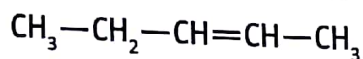
Propano



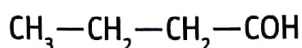
Propan-1-ol



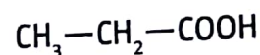
Pentan-2-ona



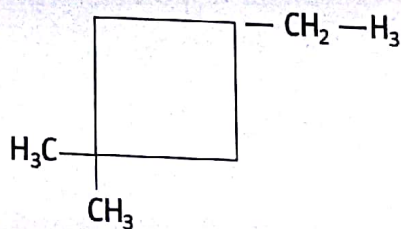
Pent-2-en



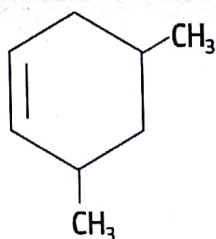
Butan-1-al



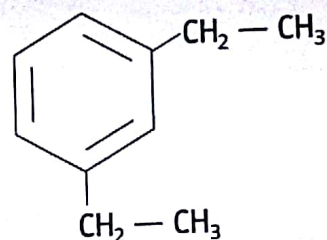
Ácido propanoico



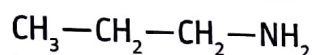
1-etil-3,3-dimetilciclobutano



3,5-dimetilciclohex-1-eno



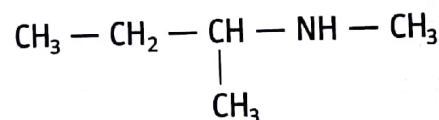
1,3-diethylbenceno



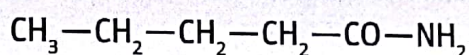
Butamina



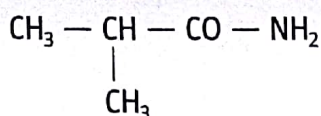
Metilmetanamina o dimetilamina



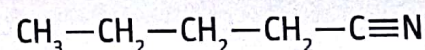
N-metilbutan-2-amina o N-metil-1-metilpropilamina



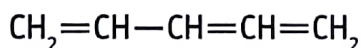
Pentanamida



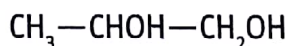
2-metilpropanamida



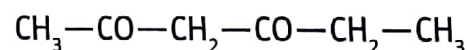
Pentanitrilo



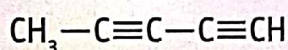
Penta-1,2,4-trien



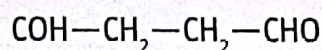
Propano-1,2-diol



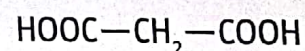
Hexano-2,4-diona



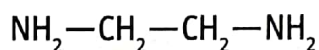
Penta-1,3-diino



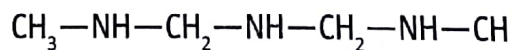
Butan-1,4-dial



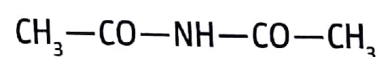
Ácido propanodioico



Etano-1,3-diamina

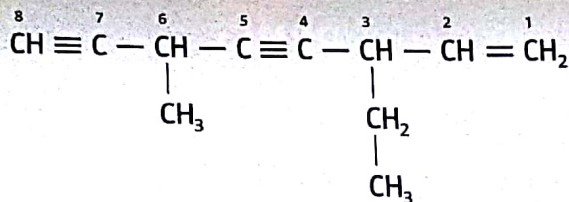


2,4,6-triazaheptano



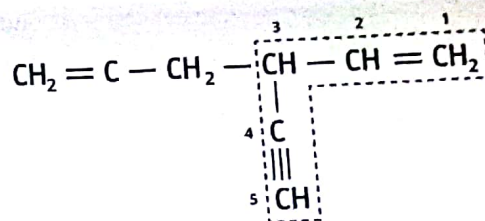
Dietanoamida

COMPUESTOS CON DIFERENTES GRUPOS FUNCIONALES



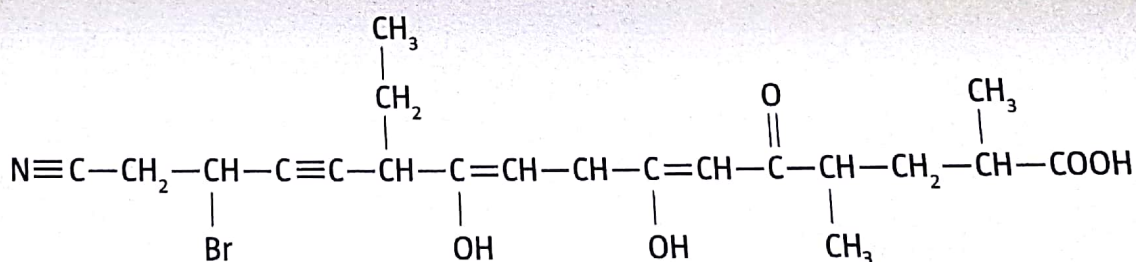
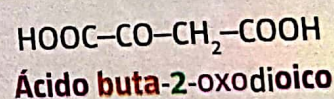
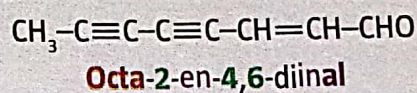
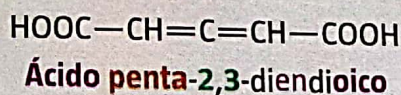
3-etil-6-metilocta-4,7-diin-1-eno

Si la cadena principal se empieza a numerar por la izquierda o por la derecha, las insaturaciones quedan en los carbonos 1, 4 y 7; pero como los dobles enlaces tienen preferencia sobre los triples, se empezará a numerar por la **derecha**, con el **doble enlace** en el **carbono 1**, los **triple enlaces** en los **carbonos 4 y 7** y dos **radicales** en los carbonos 3 y 6.



3-propilpent-4-in-1-eno

La cadena principal no es la *horizontal*, sino la **quebrada**, porque es la que tiene más insaturaciones, aunque tenga un carbono menos. Teniendo en cuenta que los dobles enlaces tienen preferencia sobre los triples, el **doble enlace** estará en el **carbono 1**, el **triple enlace** en el **carbono 4** y el **radical** en el **carbono 3**.



Ácido 14-bromo-11-etil-7,10-dihidroxi-2,4-dimetil-16-nitro-5-oxohexadec-6,9-dien-12-in-oico

El grupo funcional más importante en este compuesto es el ácido carboxilo. La **cadena principal** más larga que contiene este grupo funcional tiene **16 carbonos**. Para dar el localizador más bajo a dicho grupo carboxilo la cadena empieza a numerar por la **derecha**.

Las **cadenas laterales** se **nombran antes** que la **cadena principal**.

TABLA DE PRIORIDAD DE LOS GRUPOS FUNCIONALES

PRIORIDAD DECRECIENTE DE LOS GRUPOS FUNCIONALES					
Orden	Función	Grupo funcional	Nombre del grupo principal	Sustituyente	Ejemplo
1.º	Ácido carboxílico	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C} \\ \text{OH} \end{array}$	Ácido -oico	Siempre es principal.	CH_3-COOH Ácido etanoico
2.º	Sal y éster	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C} \\ \text{O}- \end{array}$	-ato de -ilo	-oxicarbonil-	$\text{CH}_3-\text{COO}-\text{CH}_3$ Etanoato de metilo
3.º	Amida	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}-\text{NH}_2 \end{array}$	-amida	carbamoil-	$\text{CH}_3-\text{CO}-\text{NH}_2$ Etanoamida
4.º	Nitrilo	$-\text{C}\equiv\text{N}$	-nitrilo	ciano-	$\text{CH}_3-\text{C}\equiv\text{N}$ Etanonitrilo
5.º	Aldehído	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C} \\ \text{H} \end{array}$	-al	formil-	CH_3-CHO Etanal
6.º	Cetona	$\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}- \end{array}$	-ona	oxo-	$\text{CH}_3-\text{CO}-\text{CH}_3$ Propanona
7.º	Alcohol	$-\text{OH}$	-ol	hidroxi-	$\text{CH}_3-\text{CH}_2\text{OH}$ Etanol
8.º	Amina	$-\text{NH}_2$	-amina	amino-	$\begin{array}{c} \text{CH}_3-\text{CH}-\text{CH}_3 \\ \\ \text{NH}_2 \end{array}$ Propan-2-amina
9.º	Éter	$-\text{O}-$	-oxi- -éter		$\text{CH}_3-\text{O}-\text{CH}_2-\text{CH}_3$ Metoxietano o etilmetiléter
10.º	Alqueno	$-\text{CH}=\text{CH}-$	-eno		$\text{CH}_2=\text{CH}$ Eteno
11.º	Alquino	$-\text{C}\equiv\text{C}-$	-ino		$\text{CH}\equiv\text{CH}$ Etino
12.º	Halogenuro de alquilo	$-\text{X}$	X-		$\text{CH}_3-\text{CHCl}-\text{CH}_3$ 2-cloropropano
13.º	Nitrocompuesto	$-\text{NO}_2$	nitro-		$\text{CH}_3-\text{CH}_2-\text{NO}_2$ Nitroetano
14.º	Radical	alquil, alquilo, arilo (aromático)	-il/-ilo		$-\text{CH}_2-\text{CH}_3$ Etilo
15.º	Alcano	$\begin{array}{c} \quad \\ -\text{C}-\text{C}- \\ \quad \end{array}$	-ano		CH_3-CH_3 Etano