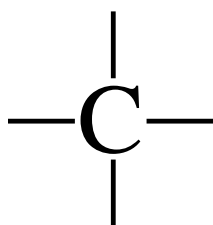
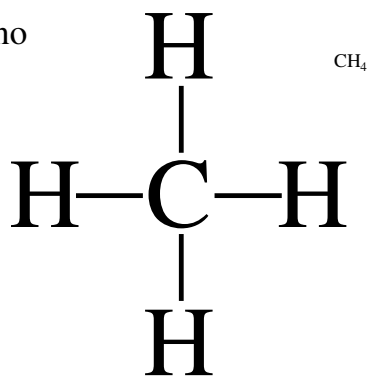


La chimica del Carbonio

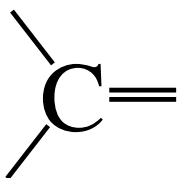
4 legami singoli



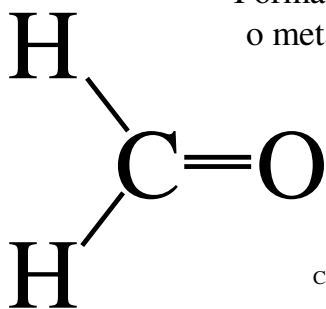
metano



2 singoli + 1 doppio



Formaldeide
o metanale

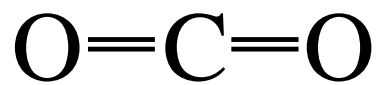


CH₂O

2 doppi



Anidride carbonica



CO₂

1 singolo + 1 triplo



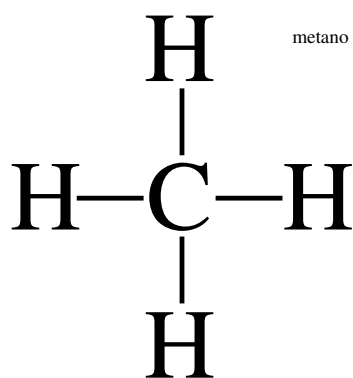
Acido cianidrico



HCN

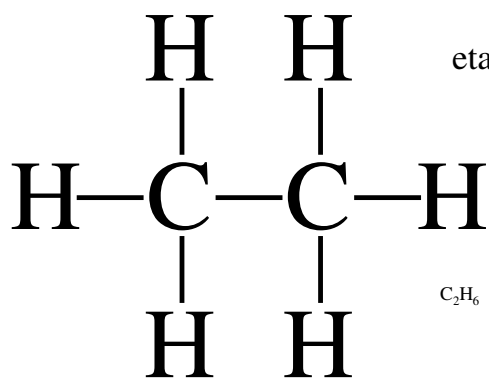
Gli idrocarburi

Composti formati da C e H



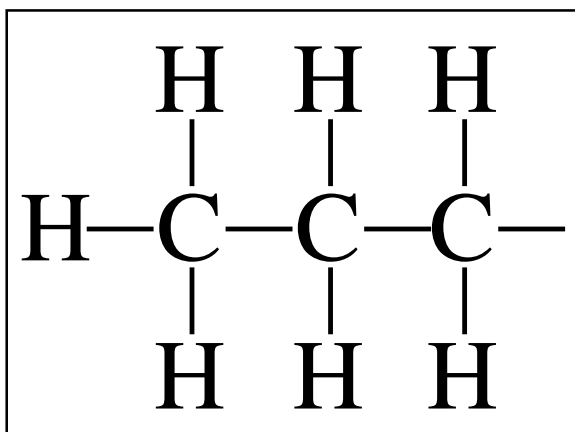
metano

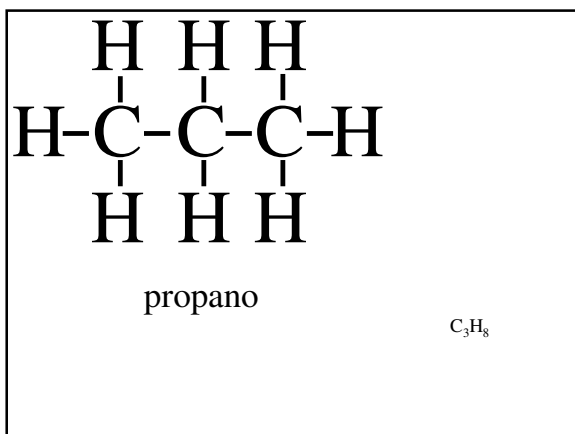
CH₄

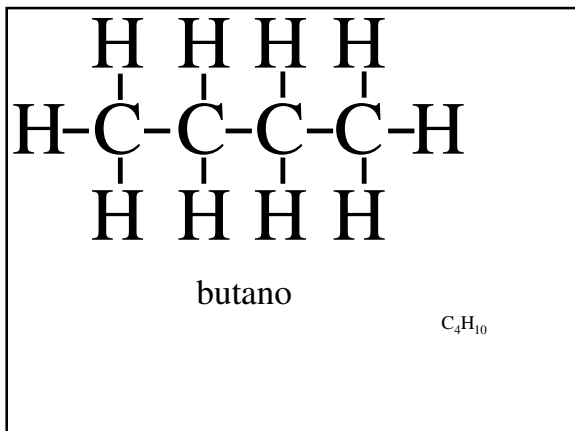


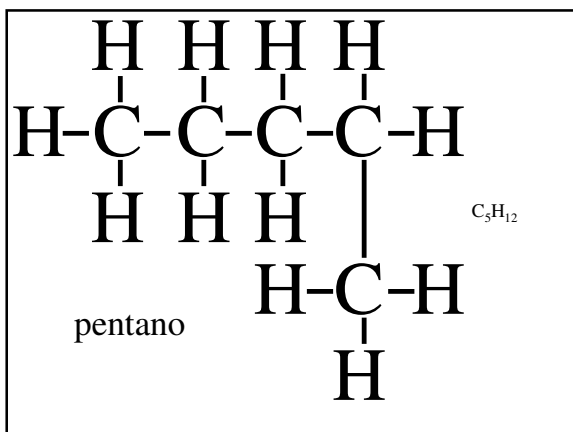
etano

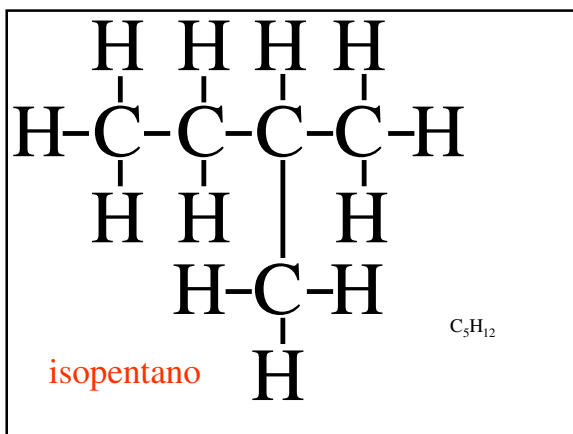
C₂H₆

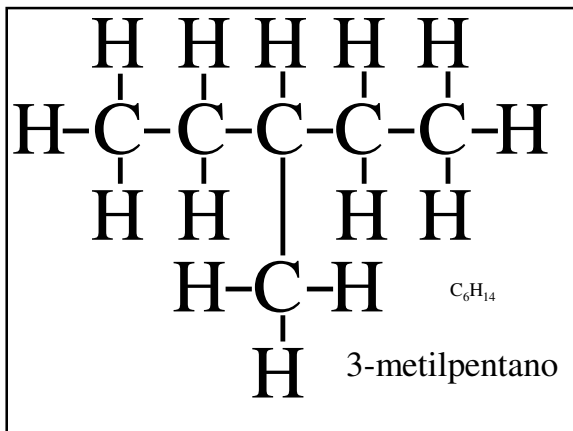


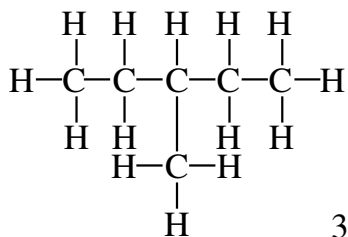






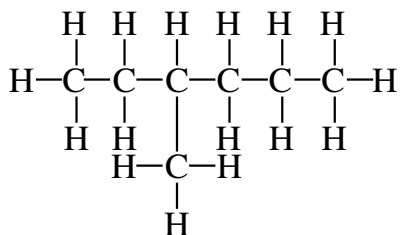


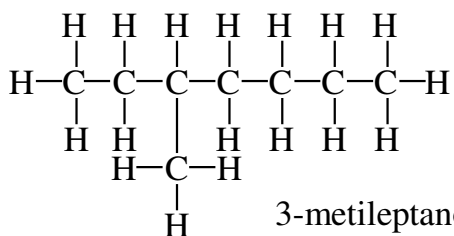




3-metilpentano

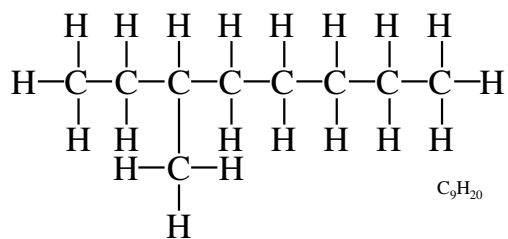
3-metilesano



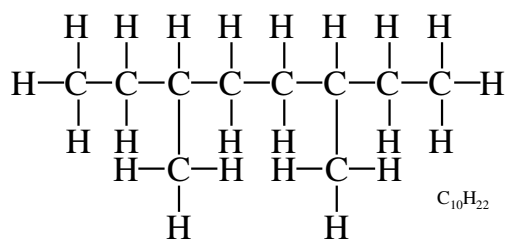


3-metileptano

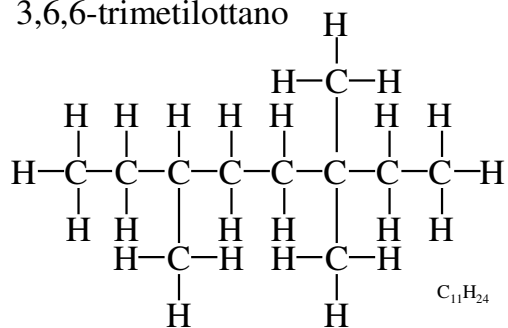
3-metilottano



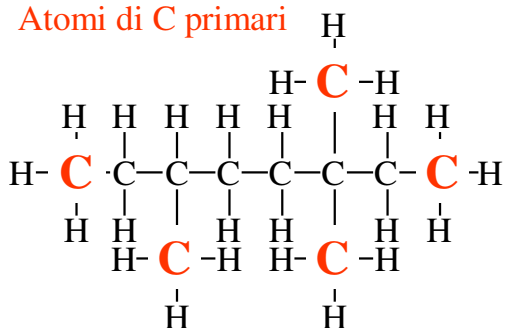
3,6-dimetilottano



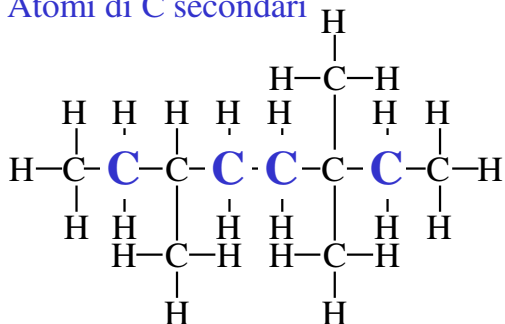
3,6,6-trimetilottano



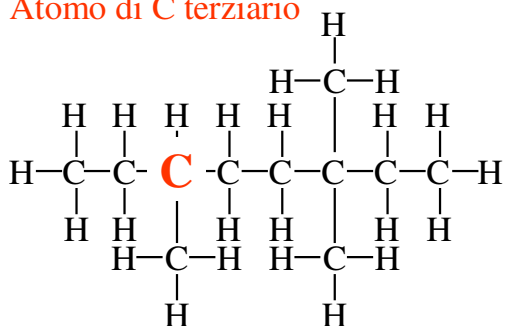
Atomi di C primari



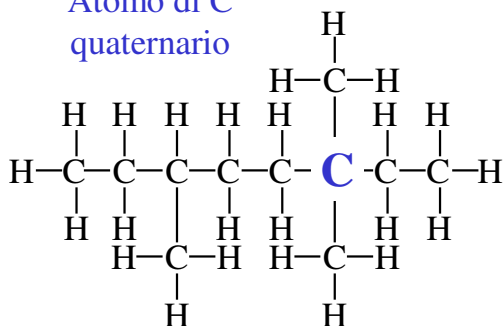
Atomi di C secondari

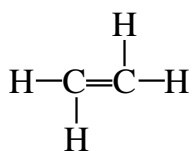


Atomo di C terziario

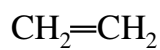
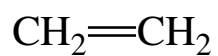


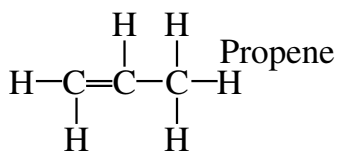
Atomo di C
quaternario





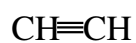
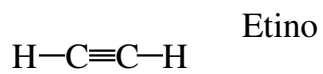
Etene

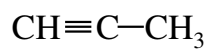
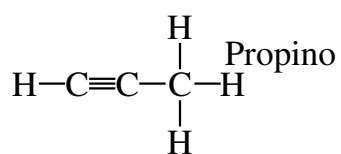




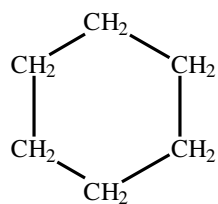
Propene



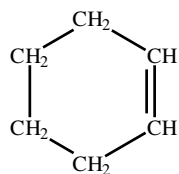




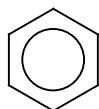
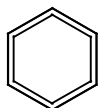
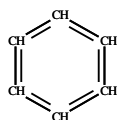
Cicloesano



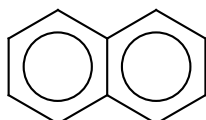
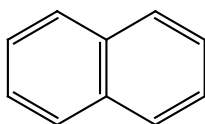
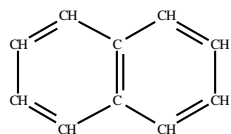
Cicloesene

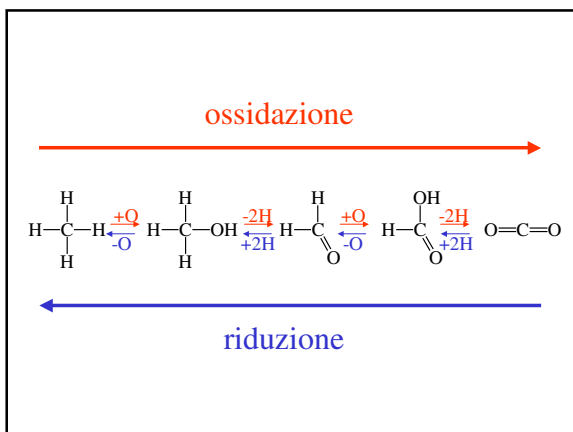


Benzene



Naftalene





Il radicale alchilico...

| Formula di struttura | Formula razionale | Formula molecolare o bruta | Nome |
|---|---|---------------------------------|--------|
| $\begin{array}{c} \text{H} \\ \\ \text{H}-\text{C}- \\ \\ \text{H} \end{array}$ | CH ₃ — | CH ₃ — | metil |
| $\begin{array}{cc} \text{H} & \text{H} \\ & \\ \text{H}-\text{C}- & \text{C}- \\ & \\ \text{H} & \text{H} \end{array}$ | CH ₃ —CH ₂ — | C ₂ H ₅ — | etil |
| $\begin{array}{ccc} \text{H} & \text{H} & \text{H} \\ & & \\ \text{H}-\text{C}- & \text{C}- & \text{C}- \\ & & \\ \text{H} & \text{H} & \text{H} \end{array}$ | CH ₃ —CH ₂ —CH ₂ — | C ₃ H ₇ — | propil |

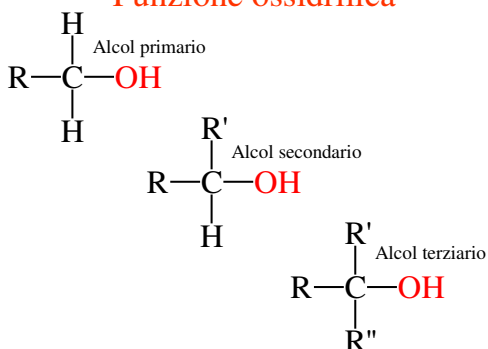
.....

| | | |
|--|-----------------------------------|---------------|
| CH ₃ —(CH ₂) ₂ —CH ₂ — | C ₄ H ₉ — | Butil |
| CH ₃ —(CH ₂) ₃ —CH ₂ — | C ₅ H ₁₁ — | Pentil |
| CH ₃ —(CH ₂) ₄ —CH ₂ — | C ₆ H ₁₃ — | Esil |
| CH ₃ —(CH ₂) ₁₄ —CH ₂ — | C ₁₆ H ₃₃ — | Decaesil |
| CH₃—(CH₂)_n—CH₂— | R— | Alchil |

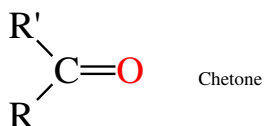
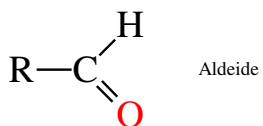
Funzioni semplici con Ossigeno
ordinate per grado di ossidazione

1. Ossidrilica
2. Carbonilica
3. Carbossilica

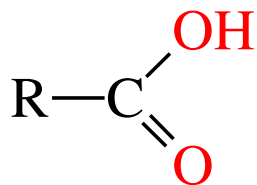
Funzione ossidrilica



Funzione carbonilica



Funzione carbossilica

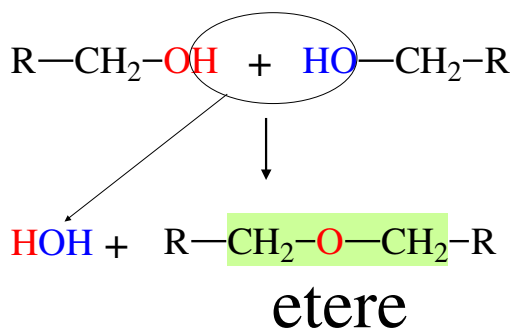


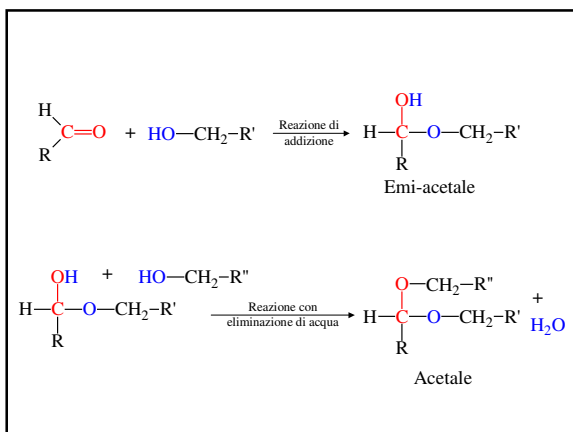
Acido carbossilico

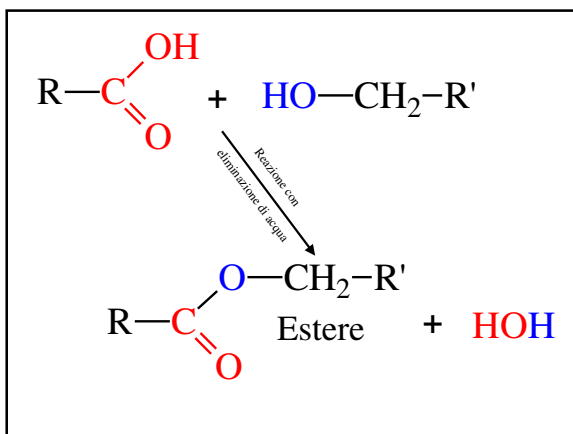
Funzioni semplici con Ossigeno

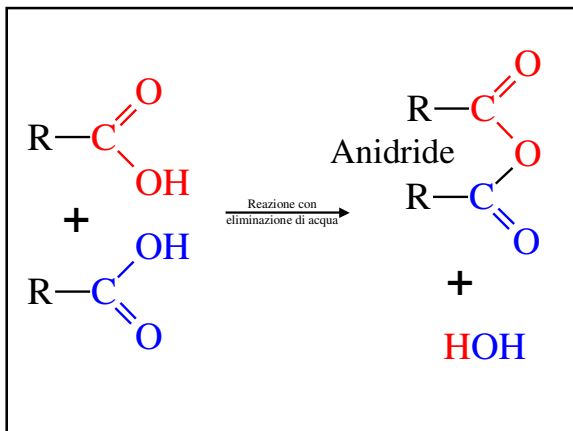
| Nome della famiglia | Nomenclatura | Formula della funzione | Nome della funzione | Nomenclatura in composti complessi |
|---------------------|--|--|---------------------|---|
| Alcoli | idrocarb olo | —C—OH | ossidrile | ... ossi ... |
| Aldeidi e Chetoni | idrocarb ale idrocarb one | >C=O | carbonile | ... aldo cheto ... |
| Acidi carbossilici | Ac. idrocarb oico | $\text{—C} \begin{array}{l} \nearrow \text{OH} \\ \searrow \text{O} \end{array}$ | carbossile | ... carbossi ... |

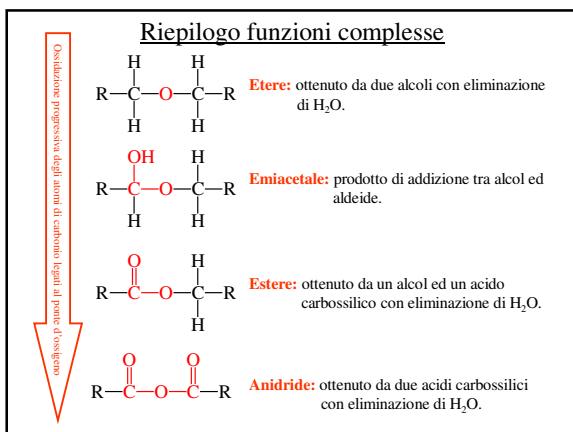
Funzioni complesse



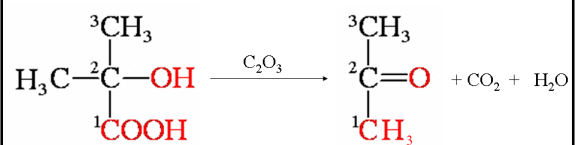








Dall'**OSSIDAZIONE** di **α -OSSIACIDI** si ottengono **CHETONI**
(se l'alcool e' terziario)



α -metil- α -ossipropanoico
2,2-metil ossipropanoico

dimetilchetone
propanone
(**ACETONE**)
