

QUÍMICA

Principais Funções Orgânicas:

Funções Nitrogenadas:

Amina, Amida, Nitrila, Isonitrila e Nitrocomposto

Parte 1

Prof^a. Giselle Blois

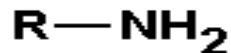
Funções Nitrogenadas

São os compostos orgânicos formados por átomos de carbono, hidrogênio e nitrogênio.

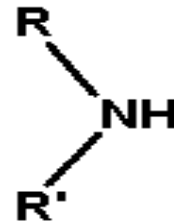
* Em alguns casos possuem átomos de oxigênio também.

AMINA

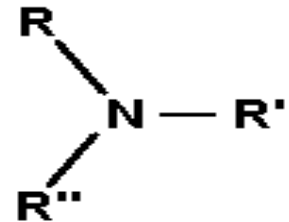
É a função nitrogenada derivada da amônia (NH_3), pela substituição de um, dois ou três hidrogênios por substituintes orgânicos (grupos alquilas ou arilas).



**amina
primária**

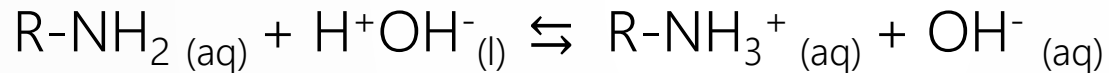


**amina
secundária**



**amina
terciária**

As aminas possuem um caráter básico:



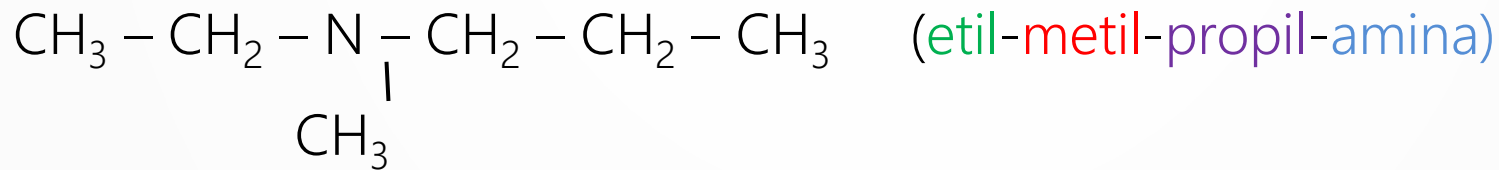
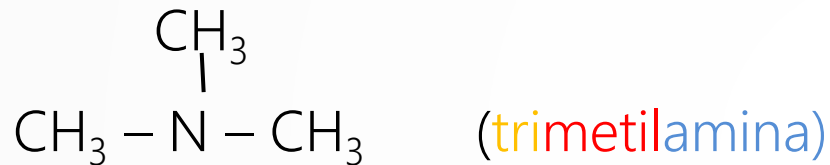
Nomenclatura:

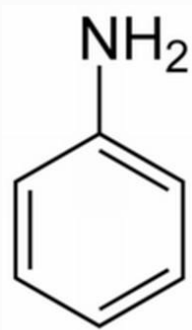
Oficial: AMINO _____

(nome do hidrocarboneto)

Usual: _____ AMINA

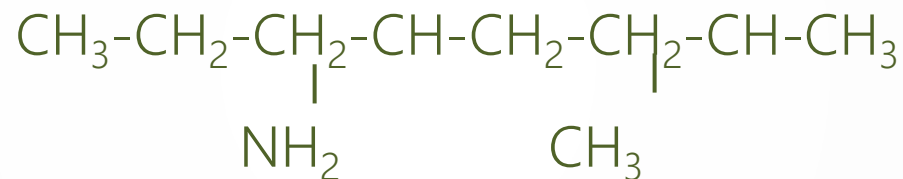
(nome do radical)





fenilamina

(anilina)

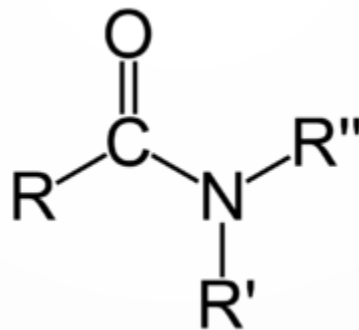


4 – amino – 7 – metil octano



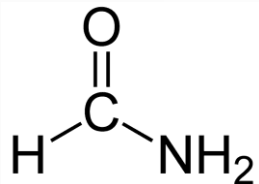
AMIDA

São compostos orgânicos nitrogenados derivados da amônia, pela substituição de um ou mais hidrogênios pelo igual número de radicais acilas monovalentes derivados dos ácidos carboxílicos.

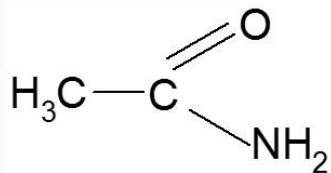


Nomenclatura:

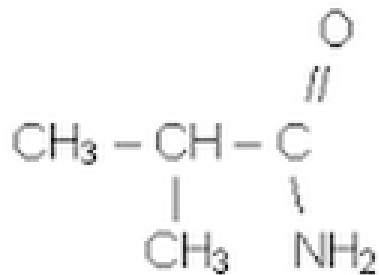
_____ AMIDA
(nome do hidrocarboneto)



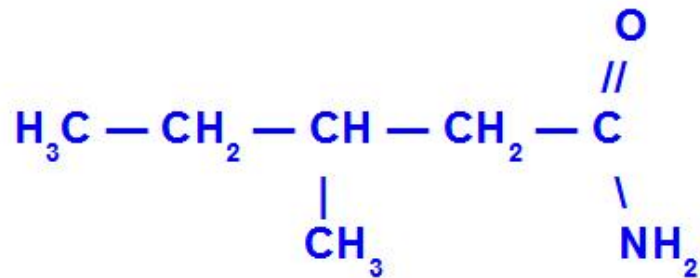
METANAMIDA (formamida)



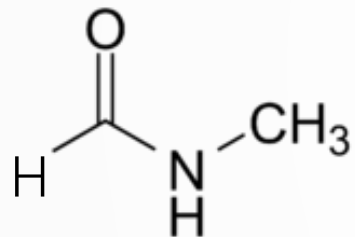
ETANAMIDA (acetamida)



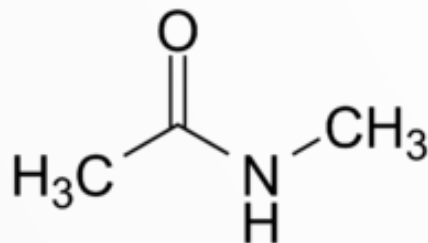
METIL PROPANAMIDA



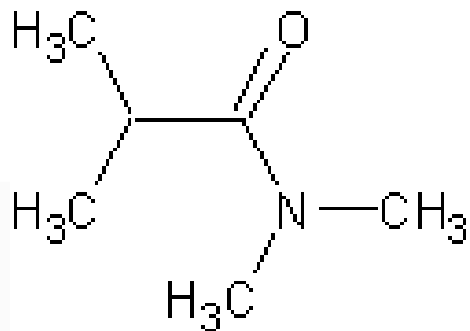
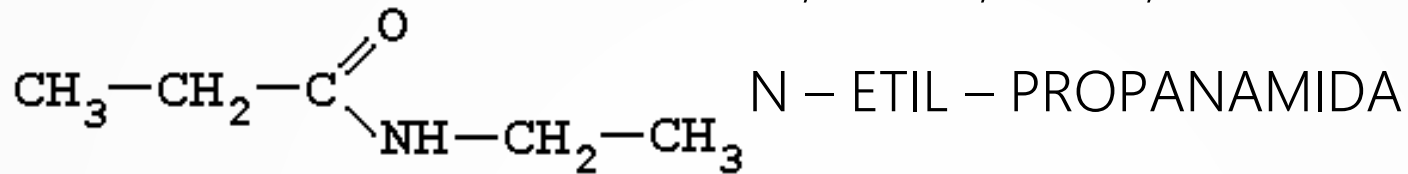
- METIL PENTANAMIDA



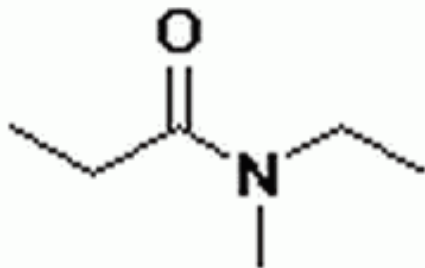
N - METIL METANAMIDA



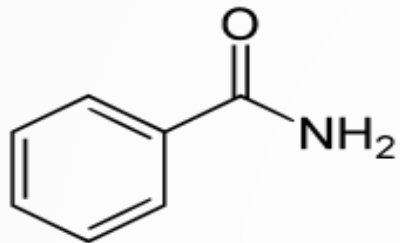
N - METIL ETANAMIDA



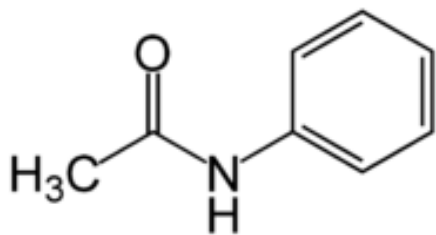
N,N - DIMETIL METIL PROPANAMIDA



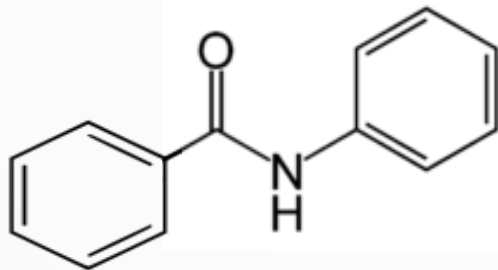
N - ETIL N - METIL PROPANAMIDA



FENIL METANAMIDA (benzamida)



N – FENIL ETANAMIDA



N-FENIL FENIL METANAMIDA
(N-fenil benzamida)