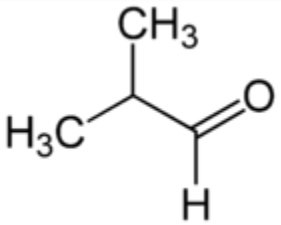
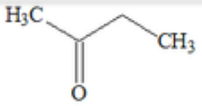
Isobutirraldeide

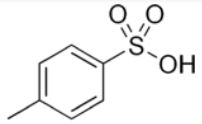




p.e.63°C
Moderatamente sol H2O
Solubile in etere
MV1

p.e.80°C
Solubile in acqua
MV2

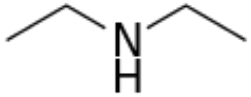
Acido 4-toluensolfonico



p.e.140° con dec
Solubile in Acqua
PV3

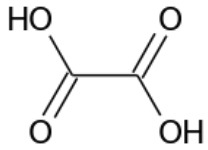
Ka= $6x10^{-2}$

Dietilammina



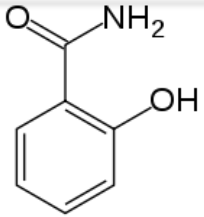
p.e.55°C
Solubile in H2O
MV2

Acido ossalico

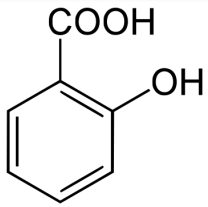


p.f. 101°C – p.e. ca 365°C
Solubile in Acqua
PV3

Salicilammide

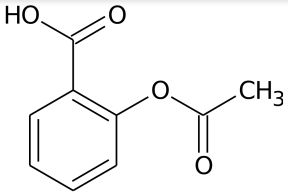


p.e. 181,5°C
Solubile in Etere, pochissimo sol in H2O a caldo
PV1, NaOH



Ka= $1x10^{-3}$

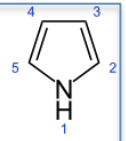
p.f. 159°C p.e. 211°C
Solubile in Etere, pochissimo sol in H2O a caldo
PV1, $NaHCO_3$



Ka= $3x10^{-4}$

p.f. 136°C p.e.140° con dec
Solubile in Etere, pochissimo sol in H2O a caldo
PV1, Na_2CO_3 - NaOH

Pirrolo

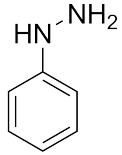


p.e.130°C
Solubile in etere
MV1

1,2-diisobutilidrazina

(CH3)2CH-CH2-NH-NH-CH2-CH(CH3)2

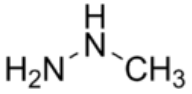
p.e. 180°C
Solubile in etere
PV1



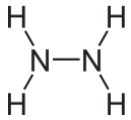
p.e. 244°C
Solubile in etere
PV1, HCl

$H_3CNHNHCH_3$

p.e.81°C
Solubile in acqua
MV2



p.e.91°C
Solubile in acqua
MV2

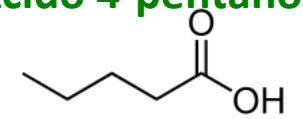


p.e.113°C
Solubile in acqua
MV2

Acido 4-pentenoico

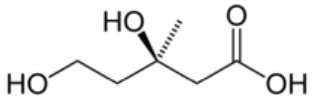
p.e.187°C
Solubile in etere, ins H_2O
PV1, $NaHCO_3$

Acido 4-pentanoico



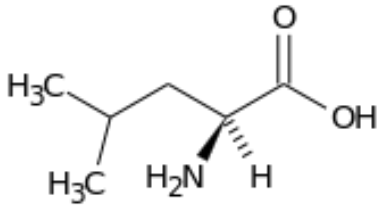
p.e.186°C
Solubile in etere, parzialm sol H_20
PV2

acido 3,5-diidrossi-3-metilpentanoico



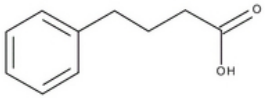
p.e.186°C
Solubile in H_20
PV3

acido 2-ammino-4-metilpentanoico



p.e.186°C
Solubile in etere, poco sol H_20
PV1/PV2

Acido 4-fenilbutanoico



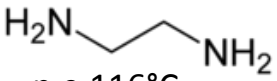
p.e.165°C
Solubile in etere
PV1, $NaHCO_3$

Difenil-4,4'-diammina

$2HN\text{-}C_6H_5\text{-}C_6H_5\text{-}NH_2$

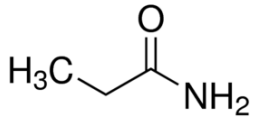
p.e.>> 140°C
Solubile in Etere, poco sol H_2O
PV1, $NaHCO_3$

Etilen-diammina



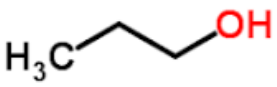
p.e.116°C
Solubile in H_2O
MV2

propionammide



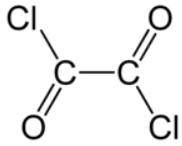
p.e.213°C
Solubile in H2O
PV3

1-propanolo



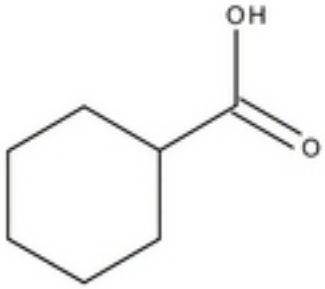
p.e.96°C
Solubile in H2O
MV2

Cloruro di ossalile

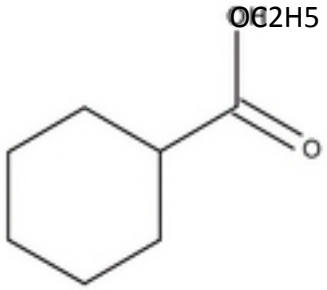


p.e.63°C
Solubile in H2O
MV5

Acido cicloesancarbossilico - etilestere

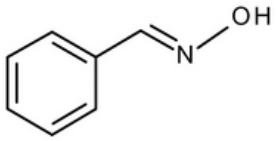


p.e.231°C
Solubile in etere
PV1 NaHCO3



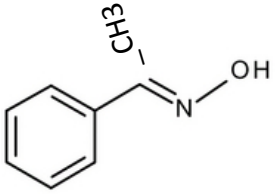
p.e.> 200°C
Solubile in etere
PV1 NaOH

Benzaldossima



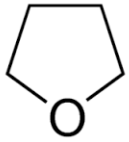
p.e.123°C (10 mmHg)
p.e. >>140° C (760 mmHg)
Solubile in etere
PV1 NaOH

Acetofenossima



p.e. 120°C (10 mmHg)
p.e. >> 140° C (760 mmHg)
Solubile in etere
PV1 NaOH

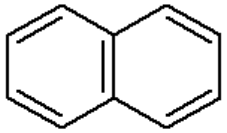
Tetraidrofurano



p.e.66°C
Solubile in acqua
MV2

2-metossinaftalene

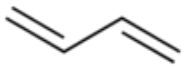
PV1



Naftalene

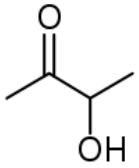
p.e.218°C
Solubile in etere
PV1 ur

1,3-butadiene



p.e.-4°C
Solubile in etere
MV1

1-idrossi-2-butanone



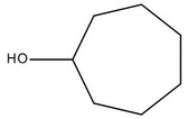
p.e. 147,9°C
Solubile in acqua
PV3

4,5-ottandione

CH3-CH2-CH2-CO-CO CH2-CH2-CH3

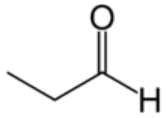
p.e.ca 190°C
Solubile in etere
PV1 HI

Cicloeptanolo



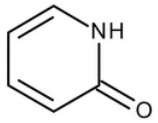
p.e.231°C
Solubile in etere
PV1 – anidride ftalica

Propionaldeide



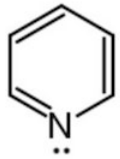
p.e. 48°C
Solubile in acqua
MV2

2-idrossi piridina



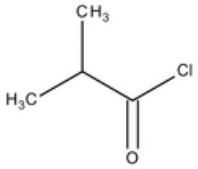
p.e. 279°C
Solubile in acqua
PV3

piridina



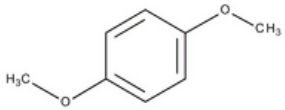
p.e. 115°C
Solubile in acqua
MV2

Cloruro di isobutirrile



p.e. 92°C
Solubile in acqua (dec)
MV5

1,4 -dimetossibenzene



p.e. 213°C
Solubile in etere
PV1 HI – Girard-T

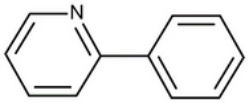
4-nitrofenolo

p.e. 279°C
Solubile in etere
PV1 Na2CO3

Dietilestere dell'acido butandioico

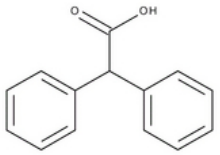
p.e. >140°C
Solubile in etere
PV1 NaOH

2-fenilpiridina



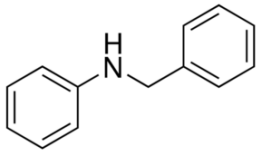
p.e. 269°C
Solubile in etere
PV1 HCl

Acido difenilacetico



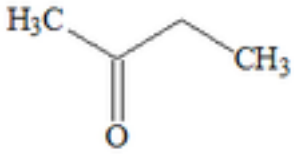
p.e. 195°C
Solubile in etere
PV1 NaOH

N-benzilanilina



p.e. >140°C
Solubile in etere
PV1 HCl

2-butanone



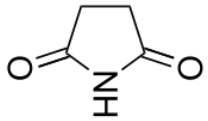
p.e. 79°C
Solubile in acqua
MV2

Fenilestere dell'acido acetico

$CH_3COOC_6H_5$

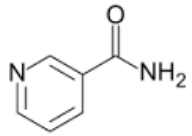
p.e. 196°C
Solubile in etere
PV1 NaOH

Succinnimide



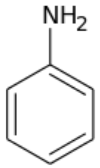
p.e. 287°C
Solubile in acqua
PV3

3-piridin carbossammide



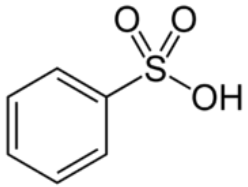
p.f. 237°C
Solubile in acqua
PV3

Anilina



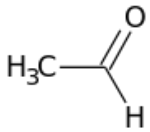
p.e. 184°C
Solubile in etere,
sol acqua
PV2

Acido benzensolfonico



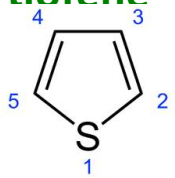
p.e. >140°C
Solubile in acqua,
ins etere
PV3

Acetaldeide

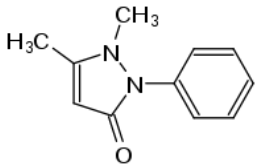


p.e. 20°C
Solubile in acqua
MV2

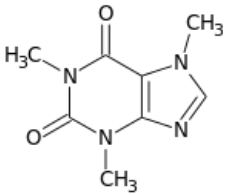
tiofene



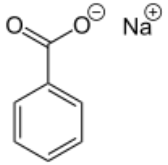
p.e. 84°C
Solubile in etere
MV1



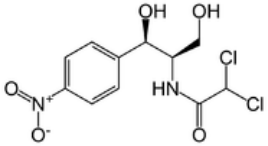
Fenazone PV3



Caffeina PV1 HCl gassoso



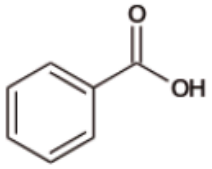
Sodio benzoato PV3



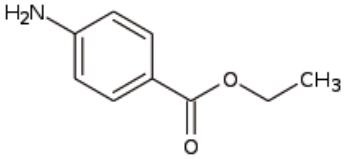
Cloramfenicolo PV1 HCl – NaOH – Anidride ftalica

Estrazione liquido-liquido in imbuto separatore

Separazione di farmaci organici con diverse proprietà acido base mediante estrazione con solvente. Partiremo da una miscela di tre farmaci allo stato solido e dimostreremo che è possibile separarli mediante semplici estrazioni acido-base sfruttando il fatto che uno di loro ha proprietà acide, uno basiche e uno non ha apprezzabili proprietà acide né basiche.



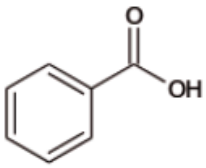
Acido benzoico Il gruppo carbossilico dell'acido benzoico ha proprietà acide (*K*a = 6.28·10-5). Solido bianco cristallino, mp 121-124 °C.



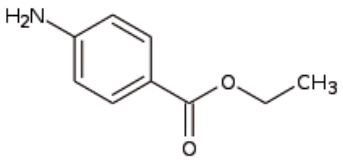
Benzocaina Il gruppo aminico della benzocaina ha deboli proprietà basiche (l'acido coniugato ha *K*a = 3.2·10-3). Solido cristallino, mp 89-92 °C.

Canfora Non ha gruppi funzionali dotati di apprezzabili proprietà acido-base. Solido cristallino bianco, mp 175°C.

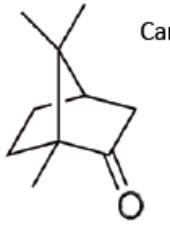
Acido benzoico



Benzocaina

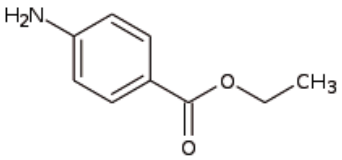


Canfora



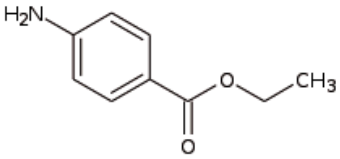
Ripartizione HCl/CH_2Cl_2

HCl

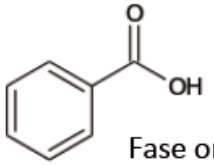


Fase acida benzocaina cloridrato

1) Na_2CO_3
2) Filtrazione
3) Lavaggio



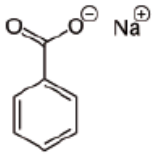
Benzocaina base libera



Fase organica

Ripartizione $NaOH/CH_2Cl_2$

Fase basica
Sodio benzoato

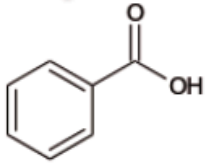


Fase organica

Canfora

1) HCl 37%
2) Filtrazione
3) Lavaggio

Anidrificazione (Na2SO4 anidro) – evaporazione solvente



Acido benzoico

Canfora