

Nomenclatura di alcoli e tioli

In generale, le regole per l'attribuzione del nome **IUPAC** sono simili a quelle incontrate per la nomenclatura dei composti già discussi. L'unica importante differenza riguarda il suffisso da utilizzare nella parte finale del nome.

Nel caso degli alcoli il suffisso è

-olo

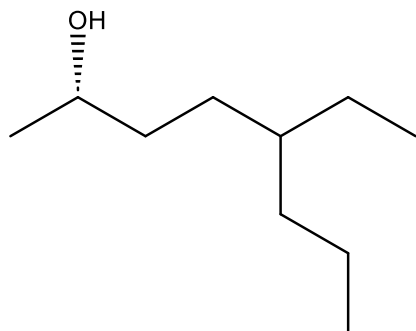
mentre nel caso dei tioli è

-tiolo

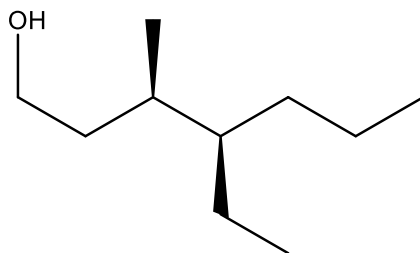
- la catena principale sarà quella più lunga contenente il gruppo **OH** o **SH**;
- si numera la catena principale in modo che **ai gruppi OH o SH sia attribuito l'indice più basso** (questi hanno la precedenza anche sui doppi e tripli legami);
- riportare nel **nome** tutti i gruppi che dipartono dalla catena principale considerandoli come sostituenti e indicando l'indice dell'atomo su cui questi risultano attaccati (utilizzare le stesse regole di ordine alfabetico e priorità di numerazione dei casi controversi già viste in precedenza);
- nel caso in cui i gruppi **-OH** e **-SH** siano contemporaneamente presenti nello stesso composto la priorità spetta al gruppo **OH** (il gruppo **-SH** va visto come sostituito e indicato con il termine **mercapto-**);
- se nella molecola sono presenti gruppi funzionali di priorità superiore a quella di **OH** allora il gruppo **-OH** va considerato gruppo sostituito e indicato con il termine **idrossi-**.

Nomenclatura alcoli

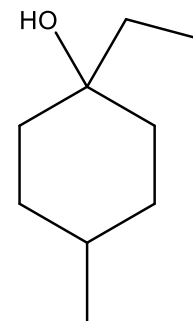
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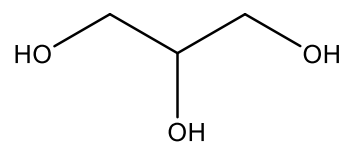
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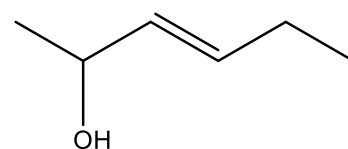
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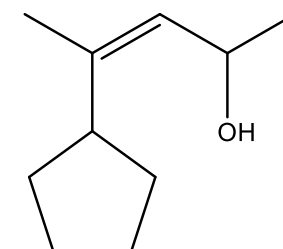
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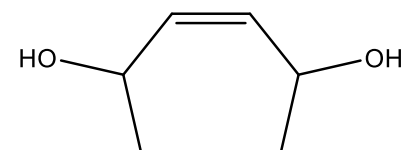
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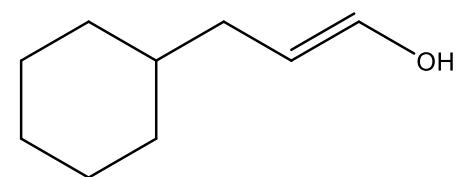
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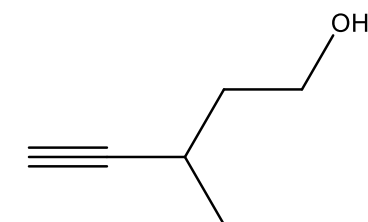
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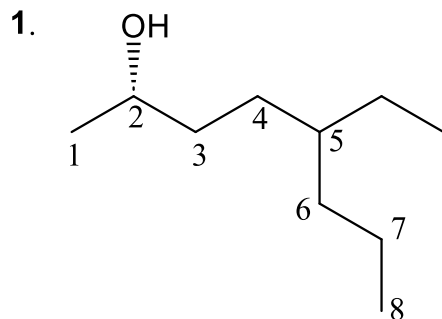
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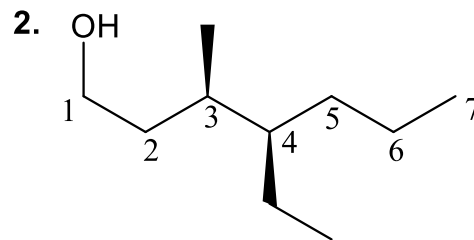
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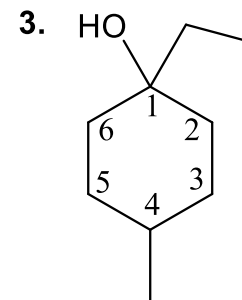
Nomenclatura alcoli_Soluzioni



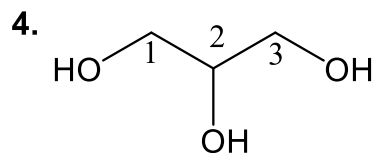
(S)-5-etilottan-2-olo



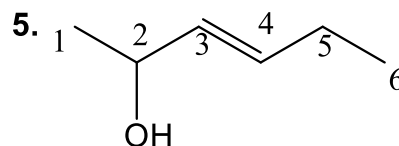
(3R,4R)-4-etil-3-metileptan-1-olo



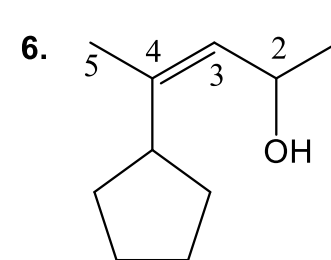
1-etil-4-metilcicloesan-1-olo



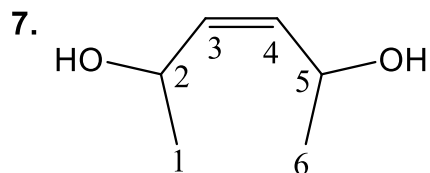
1,2,3-propantriolo
o glicerina (glicerolo)



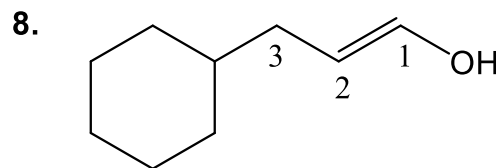
(E)-3-esen-2-olo



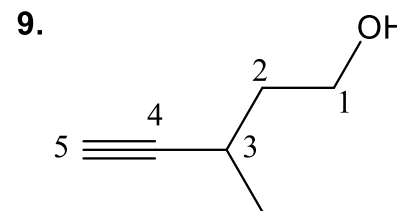
(Z)-4-ciclopentilpent-3-en-2-olo



(Z)-3-esen-2,5-diolo

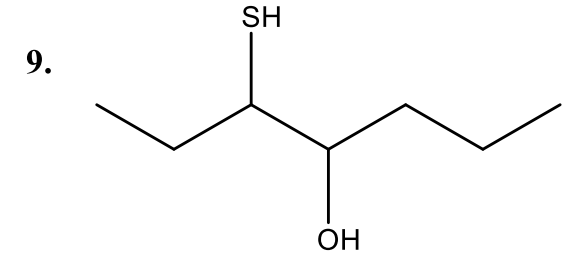
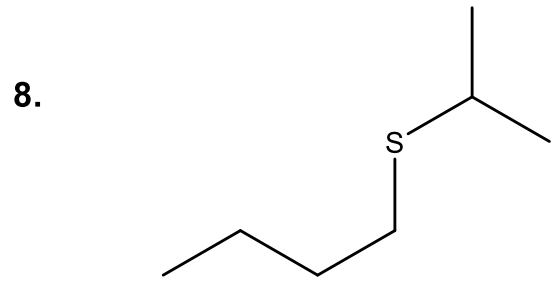
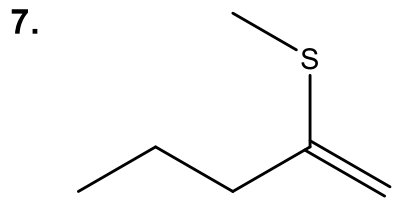
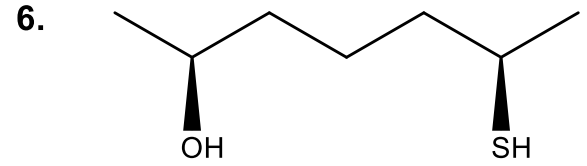
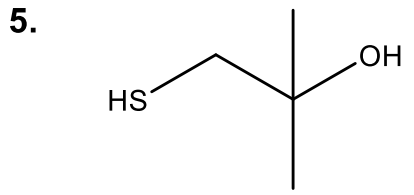
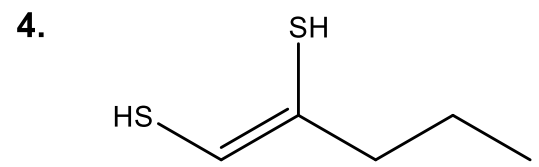
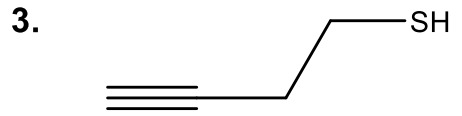
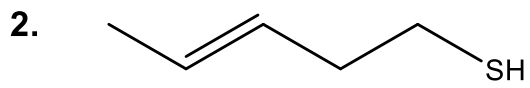
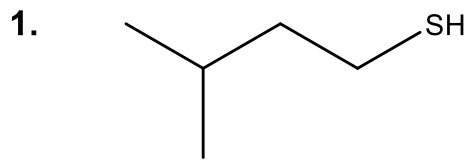


(E)-3-cicloesil-1-propenolo

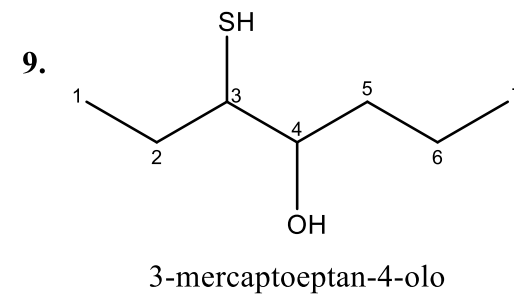
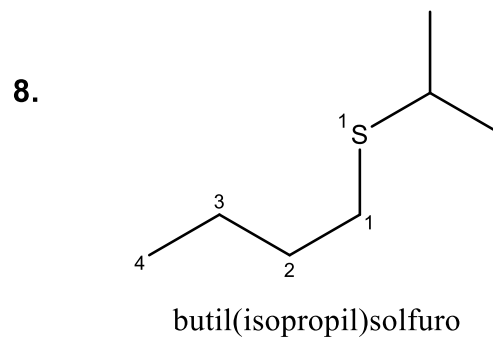
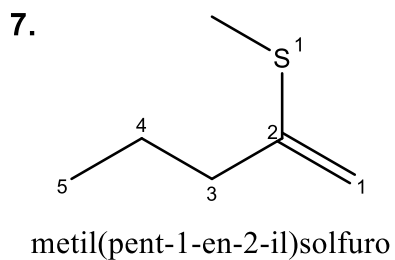
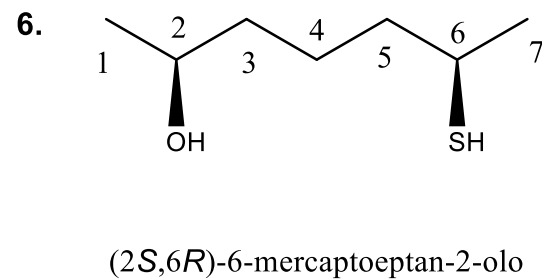
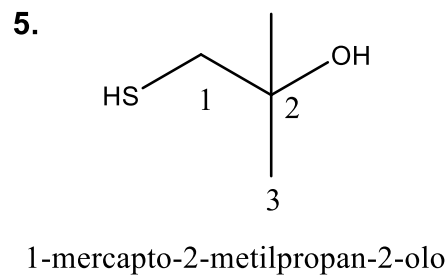
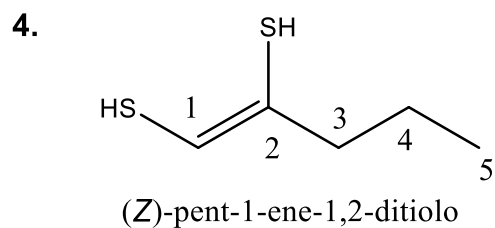
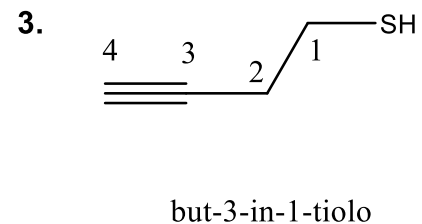
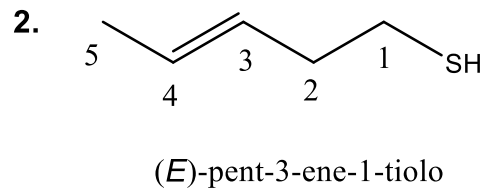
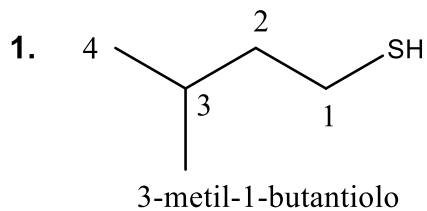


3-metil-4-pentin-1-olo

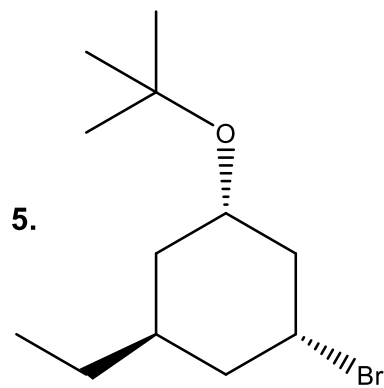
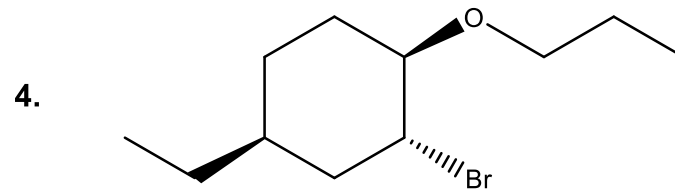
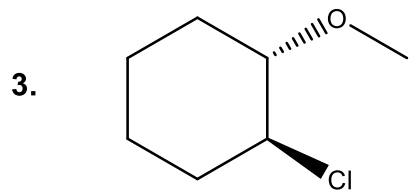
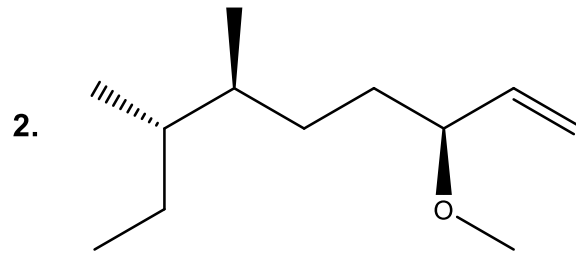
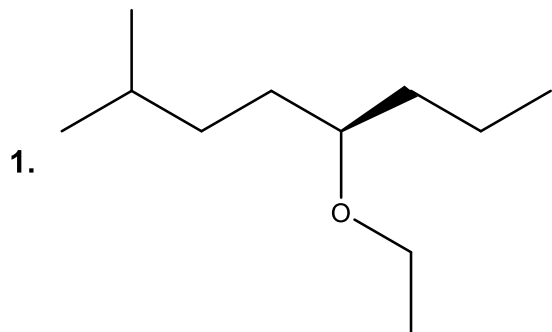
Nomenclatura tioli



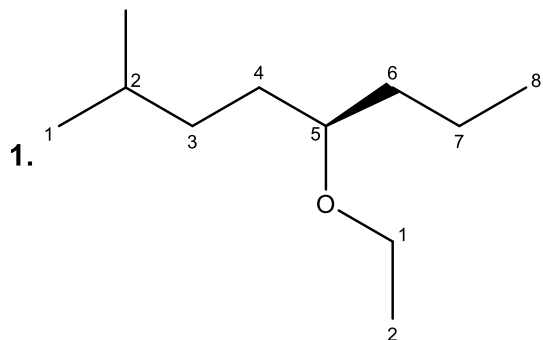
Nomenclatura tioli soluzioni



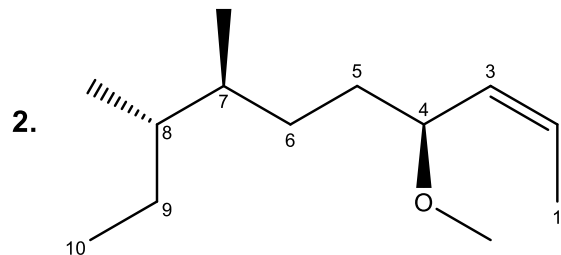
Nomenclatura eteri



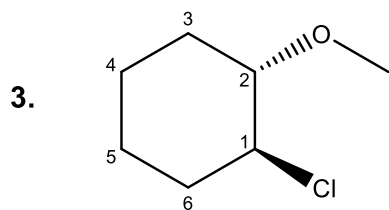
Nomenclatura eteri soluzioni



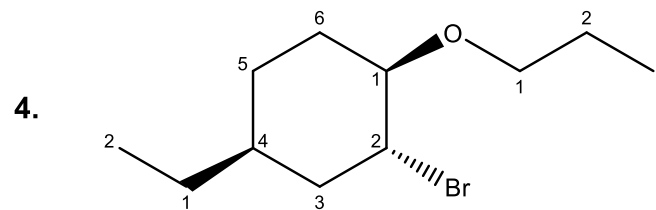
(*R*)-5-etossi-2-metilottano



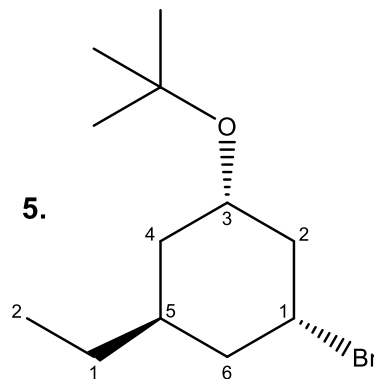
(*4S,7S,8S,Z*)-7,8-dimetil-4-metossidec-2-ene



(*1S,2S*)-1-cloro-2-metossicicloesano



(*1R,2R,4S*)-2-bromo-4-etil-1-propossicicloesano

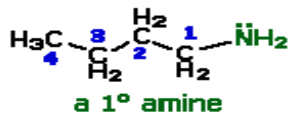


(*1R,3S,5S*)-1-bromo-3-(*terz*-butossi)-5-etilcicloesano

Nomenclatura ammine

3 sono i sistemi che vengono utilizzati comunemente :

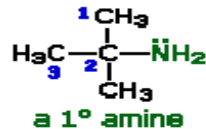
1. Il sistema IUPAC nomina il gruppo amminico come sostituente della catena alchilica più lunga. Il gruppo NH_2 è chiamato **ammino gruppo**. Per le ammine secondarie e terziarie viene usato anche un prefisso indicante i gruppi alchilici o arilici legati all'azoto non appartenenti alla catena principale.
2. In un secondo sistema (Chemical Abstract name) le ammine prendono il nome dell'alcano corrispondente sostituendo alla **-o** finale il suffisso **-ammina**
3. Infine, la nomenclatura comune prevede di elencare i gruppi alchilici legati all'azoto in ordine alfabetico e aggiungere il suffisso **-ammina**



1-aminobutano

butanammina

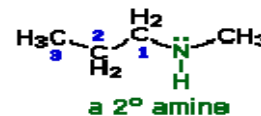
n-butilammina



2-ammino-2-metilpropano

2-metil-2-propanammina

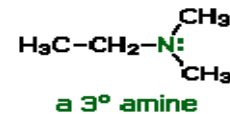
terz-butilammina



1-metilaminopropano

N-metilpropanammina

metilpropilammina



dimetilamminoetano

N,N-dimetiletanammina

etildimetilammina

Nomenclatura ammine

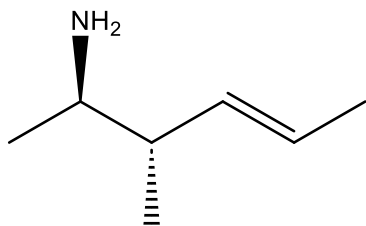
Ammine secondarie e terziarie sono considerate, in termini di nomenclatura, come ammine primarie N-sostituite.

Per assegnare il nome si procede nel seguente modo:

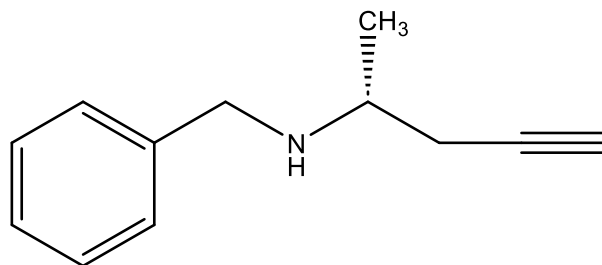
- Individuare la catena più lunga o il ciclo più grande legato dell'azoto;
- Assegnare il nome alla catena principale usando il suffisso *-ammina*;
- Individuare i sostituenti sull'azoto e sulla catena. I sostituenti sull'azoto saranno indicati nel nome utilizzando il prefisso *N-* e verranno sistemati all'inizio del nome in ordine alfabetico e prima dei sostituenti sulla catena;
- Numerare in modo da dare al carbonio legato all'azoto il numero più basso possibile.

Nomenclatura ammine

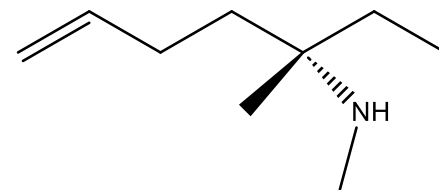
1.



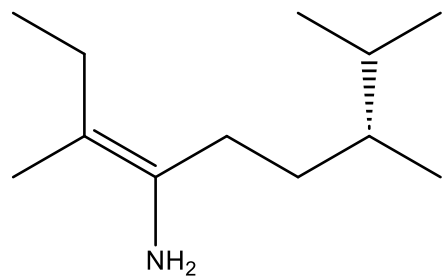
2.



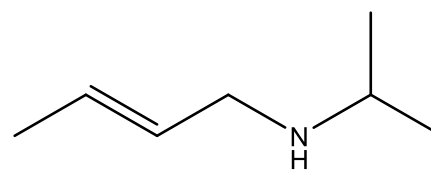
3.



4.

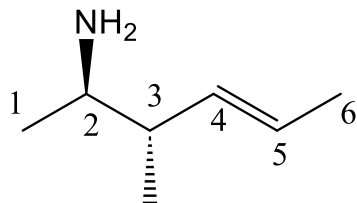


5.



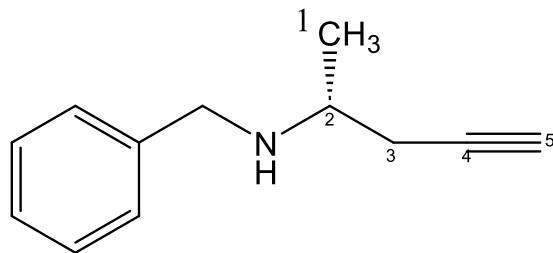
Nomenclatura ammine soluzioni

1.



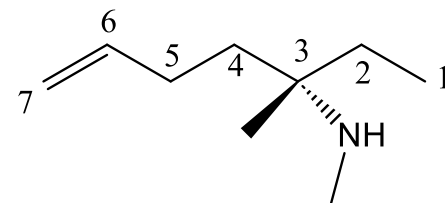
(2R,3S,E)-3-metil-2-amminoes-4-ene
oppure
(2R,3S,E)-3-metiles-4-en-2-ammina

2.



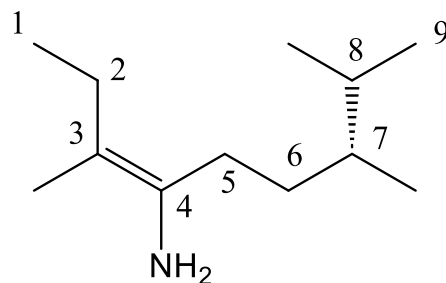
(R)-*N*-benzil-2-amminopent-4-ino
oppure
(R)-*N*-benzilpent-4-in-2-ammina

3.



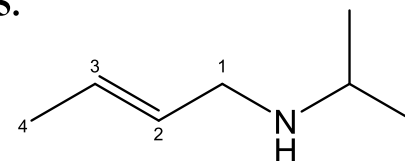
(S)-*N*-metil-3-metil-3-amminoept-6-ene
oppure
(S)-*N*-metil-3-metilept-6-en-3-ammina

4.



(R,E)-3,7,8-trimetil-4-amminonon-3-ene
oppure
(R,E)-3,7,8-trimetilnon-3-en-4-ammina

5.



(E)-*N*-isopropilamminobut-2-ene
oppure
(E)-*N*-isoproilbut-2-en-1-ammina