HETEROCYCLES IN ORGANIC CHEMISTRY

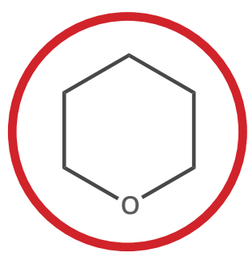
A HETEROCYCLE IN ORGANIC CHEMISTRY IS A RING OF CONNECTED ATOMS, WHERE ONE OR MORE OF THE ATOMS IN THE RING ARE ELEMENTS DIFFERENT FROM CARBON. HETEROCYCLES WITH OXYGEN, NITROGEN, AND SULFUR ARE THE MOST PREVALENT; SELENIUM, BORON, SILICON, ARSENIC & PHOSPHORUS CAN ALSO BE INCORPORATED.

OXYGEN-BASED HETEROCYCLES | NITROGEN-BASED HETEROCYCLES | SULFUR-BASED HETEROCYCLES | MULTIPLE HETEROATOM HETEROCYCLES

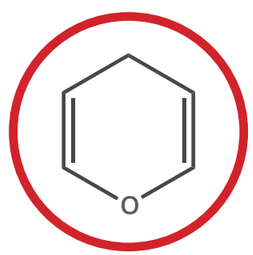
ETHYLENE OXIDE
Oxirane
C_2H_4O

TETRAHYDROFURAN
Oxolane
C_4H_8O

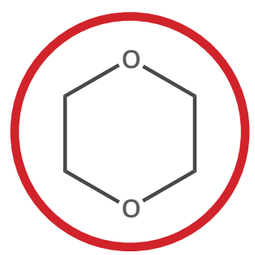
FURAN
Oxole
C_4H_4O



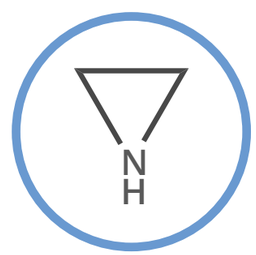
TETRAHYDROPYRAN
Oxane
$C_5H_{10}O$



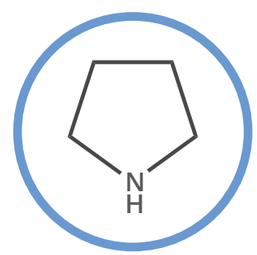
4H-PYRAN
4H-Oxine
C_5H_6O



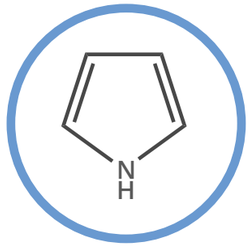
1,4-DIOXANE
p-Dioxane
$C_4H_8O_2$



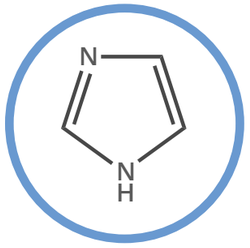
ETHYLENE IMINE
Aziridine
C_2H_5N



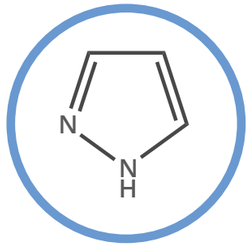
PYRROLIDINE
Azolidine
C_4H_9N



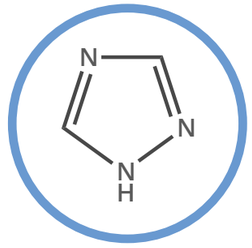
PYRROLE
Azole
C_4H_5N



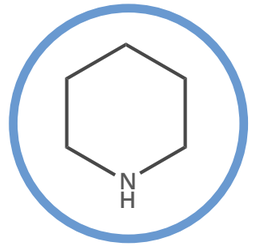
IMIDAZOLE
1,3-diazole
$C_3H_4N_2$



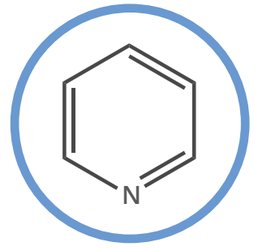
PYRAZOLE
1,2-diazole
$C_3H_4N_2$



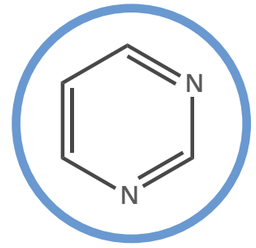
TRIAZOLE
1,2,4-triazole
$C_2H_3N_3$



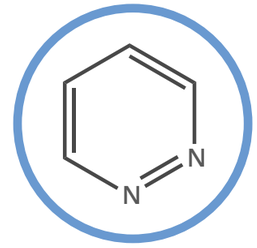
PIPERIDINE
Azinane
$C_5H_{11}N$



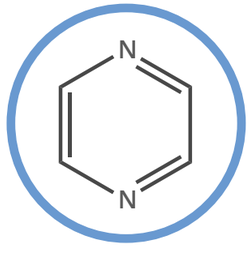
PYRIDINE
Azine
C_5H_5N



PYRIMIDINE
1,3-diazine
$C_4H_4N_2$

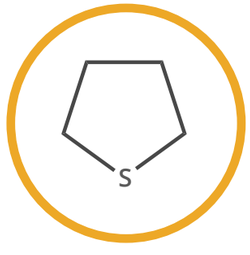


PYRIDAZINE
1,2-diazine
$C_4H_4N_2$



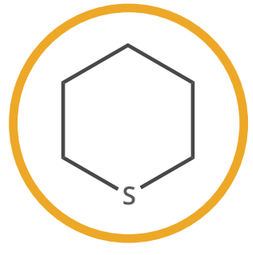
PYRAZINE
1,4-diazine
$C_4H_4N_2$

ETHYLENE SULFIDE
Thiirane
C_2H_4S

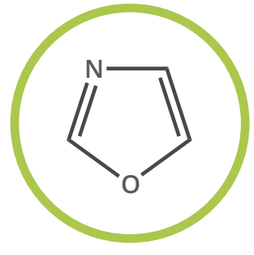


TETRAHYDROTHIOPHENE
Thiolane
C_4H_8S

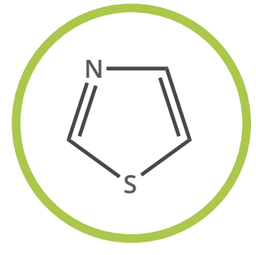
THIOPHENE
Thiole
C_4H_4S



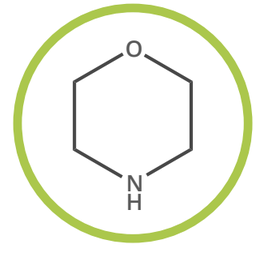
TETRAHYDROTHIOPYRAN
Thiane
$C_5H_{10}S$



OXAZOLE
1,3-oxazole
C_3H_3NO



THIAZOLE
1,3-thiazole
C_3H_3NS



MORPHOLINE
Tetrahydro-1,4-oxazine
C_4H_9NO