

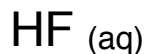
Naming Acids

Binary Acids

Binary acids are formed when hydrogen combines with another non metal. Acids are dissolved water, so therefore they are always followed by the symbol aqueous or 'aq.' There is both a classical and IUPAC way to name an acid.

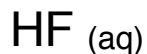
IUPAC: The IUPAC name of an acid is simply the standard IUPAC name preceded by aqueous.

Examples



aqueous hydrogen sulfide

Classical: The classical naming system has the structure of hydro(root)ic acid.



hydrosulfuric acid

Oxoacids

Acids that contain oxygen are called oxoacids. They contain H, O, and at least one other element.

IUPAC: The IUPAC name of an oxoacids have the same naming rules as binary acids.

Classical: The classical naming system depends if the ending is 'ite' or 'ate.'

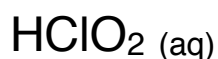
Oxoacids ending in 'ate' have the structure (root)ic acid.

Oxoacids ending in 'ite' have the structure (root)ous acid.

Examples



Carbonic acid



Nitrous acid

How to remember naming acids

My **ride** has **hydrolics**.

- If it ends in 'ide' forms hydro_____ic acid
- Example: $\text{HBr}_{(\text{aq})}$ or aqueous hydrogen bromide is hydrobromic acid.

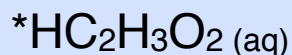
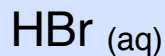
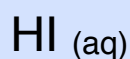
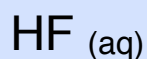
I **ate** something **icky**.

- If it ends in 'ate' it forms _____ic acid.
- Example: $\text{HNO}_{3(\text{aq})}$ or aqueous hydrogen nitrate is nitric acid.

Sprite is delicious.

- If it ends in 'ite' it forms _____ous acid.
- Example: $\text{HNO}_{2(\text{aq})}$ or aqueous hydrogen nitrite is nitrous acid.

Name the following acids



Write the formula for the following acids

Nitric acid

Sulfurous acid

Hydrochloric acid

Chloric acid

Hydroiodic acid

Hypochlorous acid

Sulfuric acid

Perchloric acid

SCH 3U
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