>>**Entry Name: Hypochlorous acid**

CAS Registry Number: 7790-92-3
Related CAS Registry Numbers(s): 14380-61-1
HOCl

Molecular Formula: ClHO
Molecular Weight: 52.46
Accurate Mass: 51.971592
Percentage Composition: Cl 67.58%; H 1.92%; O 30.50%

Source/Synthesis: Synth. from $Cl_2O + H_2O \rightarrow 5M$ HClO
Use/Importance: Powerful germicide, bleaching agent; chlorinating agent in org. chem.
Physical Description: HOCl solns. dec. to to $Cl_2 + O_2$ + some ClO_3, slowly at –20°. Forms a dihydrate at –78°. Can be stored only in aq. soln.
Solubility: Sol. H_2O
pKa Value: pK_a 7.3

>>**Derivative:** Deutero compd.
Synonym(s): Hypochlorous acid - *d*. Deuterohypochlorous acid

CAS Registry Number: 13770-22-4
Molecular Formula: ClDO
Molecular Weight: 53.466
Other Data: Interatomic distances: D-O 96.0, O-Cl 169.2 pm; angle: 102.3°

>>**Derivative:** Na salt

>>**Derivative:** Cd salt

References:

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