Table 1. Calculated hydrogen bond energies (kcal mol^{-1}) in some gas-phase dimers.[a]

Dimer	Energy	Ref.
$[F{-}H{-}F]^-$	39	[27a]
$[H_2O{-}H{-}OH_2]^+$	33	[27b]
$[H_3N{-}H{-}NH_3]^+$	24	[27b]
$[HO{-}H{-}OH]^-$	23	[27a]
$NH_4^+ \cdots OH_2$	19	[27c]
$NH_4^+ \cdots Bz$	17	[27d]
$HOH \cdots Cl^-$	13.5	[27c]
$O{=}C{-}OH \cdots O{=}C{-}OH$	7.4	[27e]
$HOH \cdots OH_2$	4.7; 5.0	[27f,g]
$N{\equiv}C{-}H \cdots OH_2$	3.8	[27h]
$HOH \cdots Bz$	3.2	[27i]
$F_3C{-}H \cdots OH_2$	3.1	[27j]
$Me{-}OH \cdots Bz$	2.8	[27k]
$F_2HC{-}H \cdots OH_2$	2.1; 2.5	[27f,j]
$NH_3 \cdots Bz$	2.2	[27i]
$HC{\equiv}CH \cdots OH_2$	2.2	[27h]
$CH_4 \cdots Bz$	1.4	[27i]
$FH_2C{-}H \cdots OH_2$	1.3	[27f,j]
$HC{\equiv}CH \cdots C{\equiv}CH^-$	1.2	[27l]
$HSH \cdots SH_2$	1.1	[27m]
$H_2C{=}CH_2 \cdots OH_2$	1.0	[27l]
$CH_4 \cdots OH_2$	0.3; 0.5; 0.6; 0.8	[27f,n–p]
$C{=}CH_2 \cdots C{=}C$	0.5	[27l]
$CH_4 \cdots F{-}CH_3$	0.2	[27q]

[a] For computational details, see the original literature. Bz = benzyl.

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