

C V NOTES

SODIUM HYPOCHLORITE

BAS-100

17-MAY-84 15:48:26

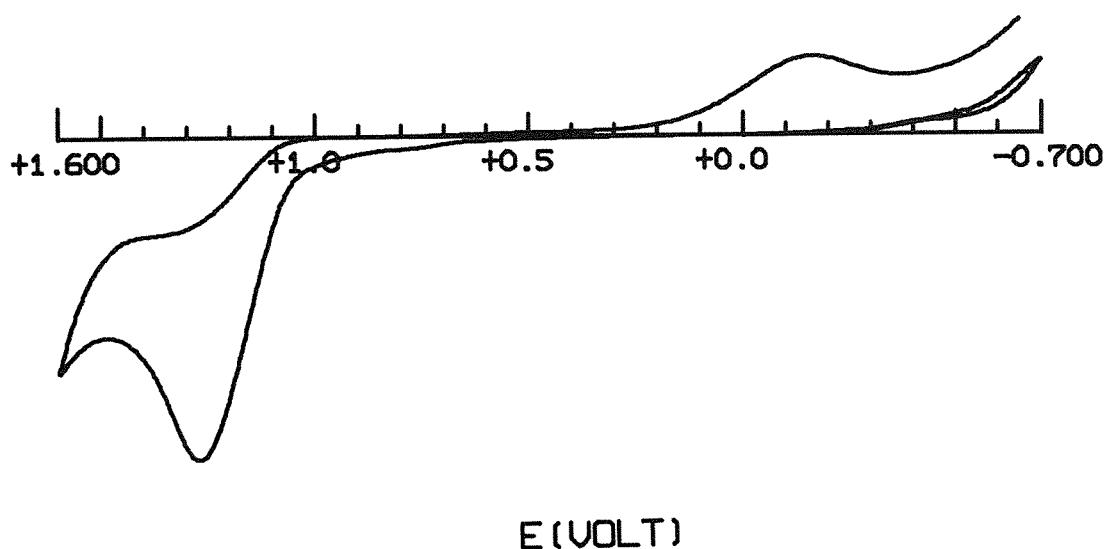
SCALE FACTOR= 64

GC/0.1M NaCl, SPIKED w/NaOCl
CYCLIC VOLTAMMETRY

200 μ A

EXP. CONDITIONS:

INIT E(mV)= 0
HIGH E(mV)= 1600
LOW E(mV)= -700
V (mV/SEC)= 200
INIT P/N= NEGATIVE
SWEEP SEGMENTS= 3
SAMPLE INT. (mV/SPL)= 3



SAMPLE: Sodium Hypochlorite
MEDIUM: 0.1M NaCl
CONC: 0.5%
RATE: 200 mV/s
ETRODE: GC
REF: Ag/AgCl
MODEL: BAS-100

Hypochlorite is one of the chemical species found in a variety of industrial products. Hypochlorite may be oxidized at $E_{pa} = +1.30$ volts to ClO_2^- which is then reduced to Cl^- at $E_{pc} = -0.18$ volts. This simple voltammogram points out the possible advantages of LCEC with dual series glassy carbon electrodes. Detection at the second electrode would enhance the selectivity of the method for hypochlorite in complex mixtures. Although the reduction of hypochlorite has been studied (on mercury electrodes), the mechanism of its oxidation on glassy carbon is not well documented at this time. BAS welcomes comments from others in this field of research on possible mechanisms.



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