



BALDOCK
The Barn, 35 Whitehorse St
Baldock, Herts
SG7 6QF
Tel: 07714 245566
Email: lbritton@silvion.co.uk
Web: www.silvion.co.uk

GRANTHAM
The Brambles, Grantham Rd
Old Somerby, Grantham
Lincs, NG33 4AB
Tel: 07872 857310
Email: rbritton@silvion.co.uk
Web: www.silvion.co.uk

POTENTIAL RELATIONSHIPS FOR SEVERAL DIFFERENT REFERENCE ELECTRODES AT 25 °C

Reference Electrode	Vs SHE (mV)	Vs SCE (mV)
Standard Hydrogen Electrode (SHE)	0	+241(Ref 1,3)
Saturated Calomel Electrode (SCE)	+241(Ref 1,3)	0
Ag/AgCl Seawater	+250	+9
Ag/AgCl 0.05M KCl	+300	+59
Ag/AgCl 0.1M KCl	+288 (Ref 3)	+47
Ag/AgCl 0.5M KCl	+250	+9
Ag/AgCl 1M KCl	+236 (Ref 1)	-5
Ag/AgCl 3M KCl	+210 (Ref 4)	-31
Ag/AgCl 3.5M KCl	+205 (Ref 2)	-36
Ag/AgCl Sat. KCl	+197 (Ref 1)	-44
Cu/CuSO ₄ Sat.	+316 (Ref 5)	+75

REFERENCES:

- 1). "Electrochemical Methods: Fundamentals and Applications", AJ Bard & LR Faulkner, John Wiley & Sons, NY (2000)
- 2). "Electrochemistry for Chemists, Second Edition", DT Sawyer, AJ Sobkowiak, J Roberts Jr., John Wiley & Sons, NY (1995)
- 3). "Handbook of Analytical Chemistry", L Meites, ed., McGraw Hill, NY (1963)
- 4). EP Friis, JET Anderson, LL Madsen, N Bonander, Per Moller, J Ulstrup, *Electrochim. Acta*, (1998)
- 5). "Reference Electrodes (Half-Cells)", J Lichtenstein, Materials Performance, Oct. 2001; Uhlig Corrosion Handbook

SILVION REFERENCE ELECTRODES

>40 Years' Service to the Corrosion Prevention Industry

Registered Office: Windsor House, A1 Business Park at Long Bennington, Nottinghamshire NG23 5JR
Registered in England No: 6860239 VAT No: 975 9426 61 EORI No: GB975942661000