09 January 2017
Technical Bulletin
Safety Data Sheet Explanation for ISE Electrodes

Products:

Product Name	Product Codes:
ISE ELECTRODE, Reference (Ref)	273-001, 3918-002
ISE ELECTRODE, Carbon Dioxide (C02)	275-001, 3918-003
ISE ELECTRODE, Bypass (B)	276-001, 3918-007
ISE ELECTRODE, Sodium (Na)	278-001, 3918-004
ISE ELECTRODE, Potassium (K)	279-001, 3918-005
ISE ELECTRODE, Chloride (Cl)	280-001, 3918-006

The following ISE electrodes listed above do not required safety data sheets (SDS) as per Title 29 of U.S. Code of Federal Regulation Part 1910.1200. These ISE electrodes are considered "articles" per 29 CFR 1910.1200.

Articles are defined by 29 CFR 1910.1200 as a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, *e.g.*, minute or trace amounts of a hazardous chemical … and does not pose a physical hazard or health risk to employees.

All of the ISE electrodes listed above meet the definition of an *Article*. There are no hazards associated with these products. Although there are some fluids used as part of the manufacturing process of these electrodes the liquids are self-contained in the electrodes.

It has been observed that the Chloride ISE electrode (280-001 or 3918-006) can release small quantities of liquid in its packing. It is normal for this electrode to leach out this trace amount of liquid. This liquid is ammonium bromide and ammonium chloride salts in solution. It is not hazardous and the amounts are considered minute or trace.

These ISE electrodes are used in clinical chemistry analyzers. During use they are subjected to biological samples. After use the ISE electrodes should be discarded as biological waste.