



SensorTech (OPC) Private Limited

<http://sensors-vns.com> ; <http://sensors-vns-opc.com>

Product Specification

Product Name: Ascorbic acid sensor SEN-ECS-As-01

Ascorbic acid, commonly known as vitamin C, has important effects on the development of healthy cells, the growth of normal tissues and the healing of wounds. The normal concentration of ascorbic acid is between 50 and 80 μM in plasma. Plasma concentration of AA below 20 μM is often associated with muscle weakness, lethargy and anaemia, whereas high concentrations will cause stomach problems. Therefore, it is necessary for sensitive detection of AA, especially in the pharmaceutical and food industries. SEN-ECS-As-01 is a specially designed electrochemical sensors for monitoring ascorbic acid falling in this range. The system comprises of a dedicated amperometric electrochemical detector that can be precisely accommodate the catalyst modified screen printed electrode to facilitate the selective and efficient oxidation of AA present in a drop of biological sample. A wide range of amplification system in form of code strip is supplied to realize the detectable concentration of As in targeted sample. Three electrodes screen printed electrode (SPE) comprising of Reference electrode (RE), working electrode (WE) and Counter Electrode (CE) are placed in a dedicated specially designed sensor system. Working

electrode of SPE is modified with electrocatalyst to facilitate the sensitive oxidation of ascorbic acid.



SEN-ECS-As-01 is a battery operated low cost portable amperometric sensor for effective use on desired site.

The online performance of the device can be visualized from the following video link.

<https://youtu.be/Stym17pd02l>