

SciLog DN 3016 SciCon Conductivity Sensor Sanitization Protocol (1)

Sanitizing Agent (2)	Conc.	Temp. ° C	pH	Pressure psi (4)	Contact Time, Min	Sani-Cycles Limit (3)	%SD (6) 10 Sani-Cycles
NaOH	0.10 N	20-30	13	0 - 5	15-30	10	0.40%
NaOH	0.50 N	20-30	13	0 - 5	15-30	10	0.40%
NaOCl (5)	500 ppm	20-30	7 - 8	0 - 5	15-30	10	1.10%
Formaldehyde Solution	1 - 2%	20-30	5 - 8	0 - 5	30	10	0.60%
Isopropyl Alcolol (IPA)	70%	20-30		0 - 5	15-30	10	0.30%

Test Protocol:

Pre-calibrated (12.88mS) SciCon conductivity sensors were exposed to sanitizing solution by pumping the solution through the in-line sensors for 30 minutes, followed by a distilled-water flush. Sensor response recovery was tested by pumping a standard solution of 0.100 M KCl through the sensor and measuring the solution conductivity, nominally 12.88 mS.

Ten, 30-minute sanitization cycles were implemented; 5 hours of total cumulative exposure

Notes:

1. SciCon conductivity sensors have been designed for disposable, single-use applications. However, with proper care, the SciCon sensors can be re-used repeatedly while maintaining good accuracy and precision. If required, the SciCon sensors can be re-calibrated.
2. SciCon sensors can be repeatedly sanitized with any of the listed sanitizing solutions. Do not exceed the recommended number of sanitization cycles. Sensor accuracy and precision will be affected by excessive cleaning / sanitization.
3. Recommended maximum number of cleaning/sanitization cycles.
4. Do not exceed the recommended sanitization pressure range.
5. 1:100 dilution of Clorox Bleach, 500 ppm of active chlorine.
6. Response variance (% standard deviation) of pre-calibrated flow cells over 10 sanitization cycles.

CAUTION: Do Not Exceed Maximum Pressure of 60 psi.

Released 11/15/06, SciLog Metrology, KS