

SciLog DN 3023: SciCon Sanitization, 1.0 Molar NaOH @ 22 °C and 50 °C, 2 Hours

Group 1: SciCon Sensor Conductivity Response after Exposure to 1.0 N NaOH Solution, Temperature (1.0 N NaOH) at 22 ° C, 2 Hours

Group 1 Temperature 22 °C Sensor ID	TRIAL 1				TRIAL 2				TRIAL 3			
	NIST Cond.	SciCon Cond.	NIST Temp	SciCon Temp	NIST Cond.	SciCon Cond.	NIST Temp	SciCon Temp.	NIST Cond.	SciCon Cond.	NIST Temp.	SciCon Temp.
C1-240173-0308	13.04	13.10	25.64	25.4	13.04	13.14	24.70	24.3	13.04	13.10	24.99	24.8
C1-240251-0308	13.04	13.06	25.64	25.5	13.04	13.11	24.70	24.4	13.04	13.08	24.99	24.8
C1-240302-0308	13.04	13.00	25.64	25.7	13.04	13.05	24.70	24.6	13.04	13.04	24.99	25.0
<i>Group Average. Group SD*</i>	13.04	13.05 0.05	25.64	25.5 0.2	13.04	13.10 0.05	24.7	24.4 0.2	13.04	13.07 0.03	24.99	24.9 0.1

SD* = Standard Deviation

Group 2: SciCon Sensor Conductivity Response after Exposure to 1.0 N NaOH Solution, Temperature (1.0 N NaOH) at 50° C, 2 Hours.

Group 2 Temperature 50 °C Sensor ID	TRIAL 1				TRIAL 2				TRIAL 3			
	NIST Cond.	SciCon Cond.	NIST Temp	SciCon Temp	NIST Cond.	SciCon Cond.	NIST Temp	SciCon Temp.	NIST Cond.	SciCon Cond.	NIST Temp.	SciCon Temp.
C1-240010-0208	13.04	13.02	25.64	25.7	13.04	13.12	24.70	24.6	13.04	13.10	24.99	25.0
C1-240060-0208	13.04	13.20	25.64	25.5	13.04	13.26	24.70	24.4	13.04	13.21	24.99	24.9
C1-240100-0208	13.04	12.91	25.64	25.5	13.04	12.93	24.70	24.7	13.04	12.84	24.99	25.2
<i>Group Average: Group SD</i>	13.04	13.04 0.15	25.64	25.6 0.1	13.04	13.10 0.17	24.7	24.6 0.2	13.04	13.05 0.19	24.99	25.0 0.2

NOTE: Scilog sensors are designed for disposable, single-use applications. However, with proper care, the SciLog sensors can be re-used repeatedly while maintaining good accurate and precision. If required, SciCon sensors can be re-calibrated.

CAUTION: Do Not Exceed Maximum Pressure of 60 pasi

Test Protocol: Six pre-calibrated (13.04 mS) SciCon Luer conductivity sensors were exposed 3x to 1.0 molar NaOH for two hours each at 22 °C (Group1) and at 50 °C (Group 2). After each 2-hour exposure, the sensors were flushed 3x with distilled water and inserted into a temperature controlled glovebox. A solution was then circulated through the sensors utilizing a peristaltic recirculation pump. The sensors were conductivity-tested and temperature-tested at the indicated standard values. The conductivity standard of the solution was tested using a NIST-traceable (YSI Model 30) conductivity meter. The temperature standard was measured using a NIST traceable temperature thermometer. The sensor responses were tabulated. The original factory calibration was maintained during the trials; no additional sensor calibrations were carried out before or during the trials. For this test, SciCon sensors were randomly selected from SciLog inventory.

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