DASGIP BioLector

Calibration Data Sheet for *DO optodes*

BioLector Calibration Data

Please enter these **calibration parameters** and the **Lot.-No.** in the BioLection software!

Lot.-No.: 1110
Filter: HC

Date of calibration: 2011/07/28

DO calibration parameters

Buffer	Sulfite system						
Temperature	**20°C**	**21°C**	**22°C**	**23°C**	**24°C**	**25°C**	**26°C**
ϕ cal0	75.14	75.08	75.03	74.97	74.92	74.86	74.81
ϕ cal100	45.37	45.13	44.89	44.65	44.40	44.16	43.92
Temperature	**27°C**	**28°C**	**29°C**	**30°C**	**31°C**	**32°C**	**33°C**
ϕ cal0	74.75	74.70	74.64	74.59	74.53	74.48	74.42
ϕ cal100	43.68	43.44	43.19	42.95	42.71	42.47	42.23
Temperature	**34°C**	**35°C**	**36°C**	**37°C**	**38°C**	**39°C**	**40°C**
ϕ cal0	74.37	74.31	74.26	74.20	74.15	74.09	74.04
ϕ cal100	41.98	41.74	41.50	41.26	41.01	40.77	40.52

Sensor properties

Dynamic range	0-100% air saturation (a.s.)
Resolution	Up to 0.1% O_2 (software)
Accuracy	± 2% dissolved oxygen (batch calibration)
Drift at 0% oxygen	< 0.03% O_2 within 30 days (sampling interval of 1 min)
Response time (t90)	< 30s
Temperature range	0-50°C
Cross-sensitivity to	Organic solvents, such as acetone, toluene, chloroform or methylene chloride Chlorine gas
Basic material	Oxygen sensor PSt3-HG-1113-01

Calibration

Calibration	0.5 M Sulfite system (Two-point calibration with oxygen-free environment (nitrogen, sodium sulfite) and air-saturated environment)
Settings	BioLector protocol = DO-calibration, T = 20-40°C, 700 rpm, 1000 µL/well, shaking diameter 3 mm, MTP-type = Flowerplate (MTP-48-BO)
Calibration device	BioLector CX_020305 (BL004)
Calibration phase offset	DO 332.2 (DO Ser.4020-hc, gain 45)

Sterilization procedure

Sterilization	Gamma irradiation (15 kGy)
BGS-certificate No	31110228
Date of sterilization	2011/07/25

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