

Von der Schweizerischen Akkreditierungsstelle akkreditierte Kalibrierstelle
Laboratoire d'étalonnage accrédité par le Service d'Accréditation Suisse
Calibration Laboratory accredited by the Swiss Accreditation Service

S Akkreditierungs-Nr.
C No. d'accréditation **SCS 0002**
S Accreditation No.

The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Zertifikat Nr.
No. du certificat **33809**
Certificate No.

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KALIBRIER – ZERTIFIKAT CERTIFICAT D'ÉTALONNAGE CERTIFICATE OF CALIBRATION

Instrument
Instrument
Instrument

Seven Conductivity/ISFET Cal Kit

Hersteller
Fabricant
Manufacturer

MT

Typ
Type
Model

ME-51302861

Serien- / Inventar-Nr.
No. de série- / inventaire
Serial- / Inv. No.

S431

Kunde
Client
Customer

Mettler-Toledo GmbH, 8606 Nänikon

Auftragsnummer
No. de la commande
Order No.

n/a

Bemerkungen
Remarques
Remarks

n/a

Datum der Kalibrierung
Date de l'étalonnage
Date of calibration

20. Juni 2022

Dieses Kalibrierzertifikat dokumentiert die Rückverfolgbarkeit auf nationale Normale zur Darstellung der physikalischen Einheiten (SI).
Ce certificat d'étalonnage confirme le raccordement aux étalons nationaux qui matérialisent les grandeurs physiques (SI).
This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).

Messresultate, Messunsicherheiten mit Vertrauensbereich und Messverfahren sind auf den folgenden Seiten aufgeführt und sind Teil des Zertifikats.
Les résultats, les incertitudes avec le niveau de confiance et les méthodes de mesure sont donnés aux pages suivantes et font partie du certificat.
The measurements, the uncertainties with confidence probability and calibration methods are given on the following pages and are part of the certificate.

Stempel und Datum
Timbre et Date
Stamp and date

ELCAL
Messgeräte • Service • Kalibration

Dietikon, 20. Juni 2022

Leiter der Kalibrierstelle
Chef du laboratoire d'étalonnage
Head of the Calibration Laboratory

Christoph Stampfli

Dieses Kalibrierzertifikat darf ohne die schriftliche Zustimmung des Laboratoriums nicht auszugsweise vervielfältigt werden.
Ce certificat ne doit pas être reproduit, sinon en entier, sans l'autorisation écrite du laboratoire.
This calibration certificate shall not be reproduced except in full, without written approval of the laboratory.



Testreport
407730

Certificate : SCS 33809
Unit under Test : MT ME-51302861 Seven Cond/ISFET Cal Kit
Serial No : S431
Customer : Mettler-Toledo GmbH, 8606 Nänikon
Inventory No :
Date : 20.06.2022
Operator : M. Huerlemann

TRACEABILITY INFORMATION

Instruments used:	Serial No:	Inventory No:	Cal Due Date:
H P 3458A	2823A07066	LAB-479	18.01.2023
FLUKE 5026A-S	A52176	LAB-195A	06.08.2022

All listed result are direct traceable to the Swiss Federal Institute of Metrology, as far as listed in the uncertainty table of the SCS Certificate. Measurements beyond the current accreditation are marked with *.

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approx 95%.

SUMMARY OF LAST RECORDED CAL DATA

This certificate records the calibration status.
Points where %Tol exceeds the adjustment threshold are marked with a "M".
Points where %Tol exceeds the specification limit are marked with a "F".
The calibration status is calculated neglecting the measurement uncertainty.

Number of Test Marginal: 0
Number of Test Failed: 0

ELCAL INSTRUMENTAL



<u>Testreport</u> 407730	Certificate : SCS 33809 Unit under Test : MT ME-51302861 Seven Cond/ISFET Cal Kit Serial No : S431 Customer : Mettler-Toledo GmbH, 8606 Nänikon Inventory No : Date : 20.06.2022 Operator : M. Huerlemann
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TEST RANGE	UUT INDICATED	SYSTEM ACTUAL	MODIFIER	ERROR	ERROR (%TOL)	EXP. M UNCERT	F
Actual Ambient Temp. 24.6 ±0.5°C / Humidity 31.4%							
Marginal limit 90% of UUT Tol.							
Seven Conductivity / ISFET Calibration Kit Verification							

All Tests refer 0.3% of Nominal Resistor Value							
1	10 Ohm Connector 10.000Ω	10.0108Ω	R_Cond.	0.108 %	36	130uΩ	
2	150 Ohm Connector 150.00Ω	150.102Ω	R_Cond.	0.068 %	23	1.3mΩ	
3	1k Ohm Connector 1.0000kΩ	0.99989kΩ	R_Cond.	-0.011 %	4	7.0mΩ	
4	1.5k Ohm Connector 1.5000kΩ	1.49939kΩ	R_Cond.	-0.041 %	14	13mΩ	
5	15k Ohm Connector 15.000kΩ	14.9966kΩ	R_Cond.	-0.023 %	8	130mΩ	
6	150k Ohm Connector 150.00kΩ	149.933kΩ	R_Cond.	-0.045 %	15	2.8Ω	
7	1M Ohm Connector 1.0000MΩ	1.00016MΩ	R_Cond.	0.016 %	5	11Ω	

End of METTLER: ME-51302861 Seven Cond. Only. Calibrat. Kit

