

# EASYCAL™ 4.0

EASYCAL™ 4.0 simplifies the tedious task of calibrating liquid handling, glass, and plastic volumetric instruments to ISO 9001 and GLP standards. Easy-to-follow procedures are outlined step-by-step and all calculations are performed automatically by the software. EASYCAL™ 4.0 generates reports to document the calibration; according to ISO 8655 all test records can be saved in a database for subsequent use and tracking of instrument performance.

- **Simplifies Data Entry:** Weighing values may be entered manually into the software or imported directly from the balance via serial port and balance-manufacturer's cable. Manufacturers' standards for BRAND instruments, as well as Eppendorf®, Biohit, and Gilson® pipettes, are included; other tolerance values may be input manually.
- **Organizes All Test Data:** Provides an easy-to-read test record that contains all data on one printable page.
- **Calibrates Small Volume Pipettes:** Using the special EASYCAL™ 4.0 testing tubes or the micro-weighing container, the calibration of pipettes below 50µL is much easier and more cost-effective than dedicated colorimetric systems or costly two-scale balances.
- **Includes SOPs:** SOPs (Standard Operating Procedures) describing testing protocols for volumetric labware and BRAND liquid handling instruments are supplied on the EASYCAL™ 4.0 CD-ROM.



## Calibrations without Calculations.



### Technical Data

#### Clearly arranged test record

The test record contains all important test data on one page.

**EASYCAL 4.0**  
Test record  
BRAND

<p><b>Instrument:</b> Transferpette No. 10 µl -3 12A4964</p> <p><b>Thermometer:</b> Goldbrand No. 1</p> <p><b>Balance:</b> Sartorius BA No. 3</p> <p>Relative humidity 50% ± 30%</p> <p>Atmosph. pressure abs(hPa): 1013</p> <p>Temperature: 22 °C / 71.60 °F</p> <p>Correction factor z: 1,00328</p>	<p><b>Note</b></p>
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Results from gravimetric tests: 5 weighings per channel EX

Test volume: 10 (µl)

Value: 9,97

Channel-No.	1	2	3	4	5	6	7	8	9	10	11	12
X 1 (mg)	9,92	9,99	9,9	9,96	9,87	9,94	9,91	9,91				
X 2 (mg)	9,92	9,99	9,94	9,98	9,9	9,94	9,99	9,93				
X 3 (mg)	9,87	9,95	9,88	9,96	9,89	9,9	9,95	9,87				
X 4 (mg)	9,92	9,98	9,94	9,98	9,92	9,94	9,96	9,97				
X 5 (mg)	9,88	9,9	9,96	9,96	9,92	9,93	9,95	9,94				
X 6 (mg)												
X 7 (mg)												
X 8 (mg)												
X 9 (mg)												
X 10 (mg)												
X Mean (mg)	9,90	9,96	9,92	9,97	9,90	9,93	9,95	9,92				
V Mean (µl)	9,93	9,99	9,96	10,00	9,93	9,96	9,98	9,96				
A(%) Act	-0,66	-0,05	-0,43	0,01	-0,68	-0,37	-0,15	-0,43				
CV(%) Act	0,25	0,38	0,33	0,11	0,21	0,17	0,29	0,37				
Result A	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.				
Result CV	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.				

Test volume: 5 (µl)

Value: 4,98

Channel-No.	1	2	3	4	5	6	7	8	9	10	11	12
X 1 (mg)	5	5,05	5,03	5,04	5,01	5,01	5,05	5,03				
X 2 (mg)	5,02	5,06	5,05	5,05	5,06	5,05	5,02	5,05				
X 3 (mg)	5	5,04	5,03	5,02	5,01	5,01	5,03	5,03				
X 4 (mg)	4,98	5,01	5,01	4,97	5	5,03	5	5				
X 5 (mg)	4,97	5,02	5	4,96	4,96	5	4,99	4,99				
X 6 (mg)												
X 7 (mg)												
X 8 (mg)												
X 9 (mg)												
X 10 (mg)												
X Mean (mg)	4,99	5,04	5,02	5,01	5,01	5,02	5,02	5,02				
V Mean (µl)	5,01	5,05	5,04	5,02	5,02	5,04	5,03	5,04				
A(%) Actual	0,21	1,05	0,81	0,49	0,49	0,73	0,69	0,73				
CV(%) Act	0,39	0,41	0,39	0,82	0,71	0,40	0,48	0,49				
Result A	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.				
Result CV	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.	i.o.				

The test was carried out accordi **ISO 8655**

Next test **07.2011**

Result: **Gravimetric test ok**

Test date: **01.03.2011**

Test Operator: **Andrea Smekal**

Signature:

#### Items supplied

- EASYCAL™ 4.0 software on one CD-ROM (English, French, German, Portuguese and Spanish)
- Installation instructions
- Operating manual
- CD-ROM also contains SOPs (English, French, German and Spanish) for Titrette®, HandyStep® S, HandyStep® electronic, Dispensette®, seripettor®, Transferpette™, and all Transferpette® models from BRAND

#### System requirements

- **Recommended:** Processor with 100MHz or better, 32MB RAM, at least 20MB free hard disk space, Windows® 98/ME or Windows® NT (SP6)/2000/XP, SVGA graphics card with 256 colors, mouse, printer, CD-ROM, and Microsoft® Paint. To read the user guide as well as the SOPs it is necessary to install Adobe® Acrobat® reader.

#### Demonstration software

EASYCAL™ 4.0 demonstration software is available and can be downloaded from the BRAND website [www.brand.de](http://www.brand.de).

Description	Cat. No.	2011 List Price
<b>EASYCAL™ professional calibration software</b>	708440	\$615.00
<b>EASYCAL™ testing tubes</b> for pipettes <50µL, 250 pieces	708462	30.00
Micro-weighing container, includes 10 filters and 3 cover caps	708470	59.00
Filter pack, 20 replacement filters (capacity apx. 1000µL)	708471	44.00
Cover cap set, 3 spare closures	708472	40.00

EASYCAL™ 4.0 supports many balances from A&D, Denver, Kern, Ohaus, Precisa, Sartorius, Scaltec, and YMC. Please contact your balance manufacturer for the appropriate interface cable.