



Physikalisch-Technische Bundesanstalt
National Metrology Institute

Order form for calibrations or tests of active dosimeters or secondary standards

Only active dosimeters and secondary standards will be calibrated which largely meet the current technical requirements with regard to the measurements to be carried out (PTB requirements resp. international standards, e.g., ISO 4037-2, DIN EN IEC 60846, IEC 61526). The customer will obtain a Calibration Certificate with a test mark. In addition, tests can be carried out according to prior agreement. The customer will obtain a Test Report.

Contact person at Department 6.3 of PTB

For photon radiation:

Dr. Hayo Zutz, phone +49 531 592-6310, e-mail: CaliSievertPhoton@ptb.de.

For beta radiation:

Dr. Rolf Behrens, phone +49 531 592-6340, e-mail: CaliSievertBeta@ptb.de.

Customer (address for the Calibration Certificate or Test Report):

Company / Organization:

Street:

Post-/ZIP-code:

Town:

Country (only if other than Germany):

Contact person:

Phone:

E-mail-address:

VAT identification number:

General specifications concerning the dosimeter

Dosimeter type:

Serial number

Manufacturer:

Measured quantity:

$H_p(10)$	Personal dose equivalent at a depth of 10 mm
$H_p(3)$	Personal dose equivalent at a depth of 3 mm Cylinder phantom (Beta irradiations will be performed on a plate phantom; the dose will be given for the cylinder phantom)
$H_p(0,07)$	Personal dose equivalent at a depth of 0.07 mm
$H^*(10)$	Ambient dose equivalent
$H'(3;\Omega)$	Directional dose equivalent at a depth of 3 mm
$H'(0,07;\Omega)$	Directional dose equivalent at a depth of 0.07 mm
$\dot{H}^*(10)$	Ambient dose equivalent rate
$\dot{H}'(3;\Omega)$	Directional dose equivalent rate at a depth of 3 mm
$\dot{H}'(0,07;\Omega)$	Directional dose equivalent rate at a depth of 0.07 mm

PTB-approved:

No

Yes

If yes, registration mark or number of the certificate:

Measured value display:

on the dosimeter/display unit

via a computer

Specify additional components with serial number that will be made available to PTB as a loan and free of charge until the completion of the order:

Instructions of use (if available)

PC-software (if available) and version number:

Reference point and reference direction

(if applicable, drawing or reference to page in the instructions for use):

Surface of the dosimeter

Geometric center of the dosimeter

Own specification:

Energy and angular dependence

Yes

Not applicable

Radiation qualities available: in conformity with ISO 4037-1 and ISO 6980-1.

Please state the desired dose rate:

6 mSv/h

Other dose rate:

Please state the desired dose:

200 μ Sv

Other dose:

Please select the desired radiation qualities.

Please enter the angles between the reference direction and the beam axis.

Angles only from 0° to $\pm 75^\circ$ in steps of 15° possible:

N-15 ($\bar{E} = 13$ keV)

N-20 ($\bar{E} = 17$ keV)

N-25 ($\bar{E} = 20$ keV)

N-30 ($\bar{E} = 24$ keV)

N-40 ($\bar{E} = 33$ keV)

N-60 ($\bar{E} = 48$ keV)

N-80 ($\bar{E} = 65$ keV)

N-100 ($\bar{E} = 84$ keV)

N-120 ($\bar{E} = 101$ keV)

N-150 ($\bar{E} = 118$ keV)

N-200 ($\bar{E} = 165$ keV)

N-250 ($\bar{E} = 207$ keV)

N-300 ($\bar{E} = 248$ keV)

S-Cs ($\bar{E} = 662 \text{ keV}$)

S-Co ($\bar{E} = 1,25 \text{ MeV}$)

R-C ($\bar{E} = 4,4 \text{ MeV}$)

R-F ($\bar{E} = 6,7 \text{ MeV}$)

^{147}Pm ($\bar{E} = 0,06 \text{ MeV}$)

^{85}Kr ($\bar{E} = 0,24 \text{ MeV}$)

$^{90}\text{Sr}/^{90}\text{Y}$ ($\bar{E} = 0,8 \text{ MeV}$)

$^{106}\text{Ru}/^{106}\text{Rh}$ ($\bar{E} = 1,2 \text{ MeV}$)

Remarks:

Linearity

Yes

Not applicable

Note concerning the costs: The rates are the same as above.
Each basic fee is levied only once.

Please state the desired radiation quality:

S-Cs

Other radiation quality:

Please indicate the measuring points at dose / dose rate:

Remarks:

Further measurements

Yes

Not applicable

Detailed description (if necessary, please use separate sheets):

Total number of measurements

Total number of measurements $\bar{E} < 2 \text{ MeV}$:

Total number of measurements $\bar{E} > 2 \text{ MeV}$:

Return shipping address

As on page 1

Other shipping address:

Company / Organization:

Street:

Post-/ZIP-code:

Town:

Country, only if other than Germany:

Contact person:

Phone:

E-mail-address:

Method of shipment:

Collection will be arranged by the customer.

Courier:

OR (if not to be X rayed):

German transport company:

Contact person:

Form of shipment

Special requirements for the form of shipment:

Value of goods:

Value of goods in Euro:

Pro forma invoice enclosed (necessary for delivery from outside EU).

Billing address

As on page 1

As above

Other billing address:

Company / Organization:

Street:

Post-/ZIP-code:

Town:

Country, only if other than Germany:

Contact person:

Phone:

E-mail-address:

VAT identification number:

Note: Prices according to the “Price List of PTB”:

For measurements with photon radiation or beta radiation:

2244 €	basic fee
306 €	per measuring point for radiation qualities up to 2 MeV
1632 €	for the first measuring point above 2 MeV
969 €	for each further measuring point above 2 MeV

A measuring point comprises a radiation quality and an angle, i.e., measurements at the same radiation quality, but at different angles are considered as several measuring points.

The amounts are net prices excluding value added tax. All fees and costs exclude the statutory value-added tax.

Note concerning the costs:

All tasks within the scope of this order will be billed based on the prices according to the “Price List of PTB”. The valid prices which momentarily apply to Department 6.3 are published on the Internet under:

<https://www.ptb.de/cms/en/ptb/fachabteilungen/abtz/z14/fees-and-charges.html>

The costs are not legally binding. Expenses which significantly exceed the usual figures are billed according to the hourly rates published in the “Price List of PTB”. In such cases, PTB will consult the customer in beforehand.

The General Terms and Conditions of Business (AGB) of PTB apply:

<https://www.ptb.de/cms/en/metrological-services/terms-and-conditions-of-business.html>

The applicant's general terms and conditions cannot be accepted even if he explicitly refers to them.

The provision of certain personal data is necessary for your order to be processed (contact person). For information on PTB's handling of such data, see

<https://www.ptb.de/cms/en/service-seiten/data-protection.html>.

Hereby, the customer bindingly orders the Physikalisch-Technische Bundesanstalt Braunschweig (PTB) to carry out measurements as stated above.

Place:

Date:

Stamp, signature: