Physikalisch-Technische Bundesanstalt
National Metrology Institute

Order form for the irradiation of passive dosemeter badges

The badges will be irradiated according to the specifications formulated in this order.
The customer will obtain a Test Report.
The dose values and irradiation conditions are listed in the Test Report.
The dosemeter badges are evaluated by the customer.

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 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 dosemeter

Dosemeter type:

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

PTB-approved:

◉ No

○ Yes

If yes, registration mark or number of the certificate:

Number of dosemeter badges:

Please provide five additional badges.
These five badges will not be irradiated and serve as transport dosemeters and spare.

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

☐ Instructions of use (if available)

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

○ Surface of the dosemeter

◉ Geometric center of the dosemeter

○ 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:

○ 500 µSv

○ Other: _____

Please select the desired radiation qualities.
Please enter the respective number of badges to be irradiated and the angles between the reference direction and the beam axis (e.g., “2 x 0°”).
Angles only from 0° to ±75° 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 keV)	
☐	S-Co ($\bar{E}$ = 1,25 MeV)	
☐	R-C ($\bar{E}$ = 4,4 MeV)	
☐	R-F ($\bar{E}$ = 6,7 MeV)	
☐	^{147}Pm ($\bar{E}$ = 0,06 MeV)	
☐	^{85}Kr ($\bar{E}$ = 0,24 MeV)	
☐	^{90}Sr/^{90}Y ($\bar{E}$ = 0,8 MeV)	
☐	^{106}Ru/^{106}Rh ($\bar{E}$ = 1,2 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 number of badges to be irradiated and the respective dose
(e.g., “4 x 0,1 mSv / 4 x 1 mSv / 4 x 10 mSv / 4 x 100 mSv / 4 x 1 Sv / 1 x 5 Sv”):

Remarks:

Further irradiations

○ Yes

◉ Not applicable

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

Total number of irradiations

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

Total number of irradiations $\bar{E}$ > 2 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 irradiations with photon or beta energies up to 2 MeV:

2244 € basic fee

102 € per irradiation

For irradiations with photon energies above 2 MeV:

1632 € additional basic fee for the first photon energy

969 € additional basic fee for each further photon energy

510 € per irradiation up to 0.5 mSv

1020 € per irradiation from 0.5 mSv up to 1 mSv

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 irradiation of dosemeter badges from the Physikalisch-Technische Bundesanstalt Braunschweig (PTB) as stated above.

Place:

Date:

Stamp, signature: