

# Dosimetry and Calibration Products & Services

2024 LIST



nordion.com



#### **Dosimetry and Calibration Products and Services**

Delivery for most items is 4 weeks subject to confirmation at time of order.

Nordion's Dosimetry Laboratory is ISO 17025 accredited for the following services:

- The calibration of routine dosimeters against Alanine reference-standard dosimeters
- The evaluation of Alanine reference-standard dosimeters
- The irradiation of customer-supplied dosimeters to known doses

# Please contact Nordion to request a quotation | +1 613 592 2790 | nordion.com

Orders are subject to Nordion's Dosimetry Terms and Conditions of Sale.

# Dosimetry and Calibration **Services**

# 1. Supply and Reading of Dosimeters

Number	Description	
10094113	Supply and Reading of Alanine Dosimeters – 4-Pellet Cylindrical Holder	
	Includes: • Supply and reading of each dosimeter • NRC CLAS 2018-01 Certificate of Measurement (Alanine measured dose) • Quality Control package	
	Notes: • Minimum Order: 7 dosimeters • Dose Range: 20 Gy to 80 kGy • This measurement service by Nordion is accredited under NRC CLAS 2018-01	
Number	Description	
10096474	Supply and Reading of Alanine Dosimeters – Disk Holder for E-Beam	
	Includes: • Supply and reading of each dosimeter • NRC CLAS 2018-01 Certificate of Measurement (Alanine measured dose) • Quality Control package	
	Notes: • Minimum Order: 7 dosimeters • Dose Range: 20 Gy to 80 kGy	
	This measurement service by Nordion is accredited under NRC CLAS 2018-01	
Number	Description	
10097202	Supply and Reading of Alanine Dosimeters - Non-Certified	
	Includes: • Supply and reading of each dosimeter, cylindrical or disk holder • Certificate of Measurement (Alanine measured dose)	
	Notes: • Minimum Order: 7 dosimeters	

- Minimum Order: 7 dosimetersDose Range: 20 Gy to 80 kGy



# Dosimetry and Calibration **Services**

# 2. Irradiation of Dosimeters

Number	Description	
10009995	Irradiation of Dosimeters – 10-Position Irradiation Stand	
	<ul> <li>Includes:</li> <li>Irradiation of dosimeters (e.g., Alanine pellets in 4-pellet holder, Alanine Tapetab in single pellet holder, Perspex PMMA films, Optichromic) to specified absorbed doses in Nordion's standard Cobalt-60 radiation field GC220 at a customer-specified constant temperature</li> <li>NRC CLAS 2018-01 Certificate of Accuracy supplied with return of dosimeters to customer</li> </ul>	
	Customer to Specify: • Number of dose points • Number of dosimeters (maximum 10) for each dose point • Irradiation temperature in °C	
	<ul> <li>Notes:</li> <li>Specified doses up to 250 kGy</li> <li>Specified irradiation temperature to be between 0°C and +60°C</li> <li>Each dosimeter must fit into a 12 mm (0.5 in) diameter cylinder with maximum height of 75 mm (3 in)</li> <li>This irradiation service by Nordion is accredited under NRC CLAS 2018-01</li> </ul>	
Number	Description	
10096469	Irradiation of Dosimeters – Film Irradiation Stand	
	<ul> <li>Includes:</li> <li>Irradiation of dosimeters (e.g., Perspex PMMA films, FWT-60 radiochromic films) to specified absorbed doses in Nordion's standard Cobalt-60 radiation field GC220 at a customer-specified constant temperature</li> <li>NRC CLAS 2018-01 Certificate of Accuracy supplied with return of dosimeters to customer</li> </ul>	
	Customer to Specify: • Number of dose points • Number of dosimeters for each dose point • Irradiation temperature in °C	
	Notes: • Specified doses up to 250 kGy • Specified irradiation temperature to be between 0°C and +60°C	

This irradiation service by Nordion is accredited under NRC CLAS 2018-01



### 3. In-Plant Calibration

#### Number

#### Description

#### 10094114

#### Routine Dosimetry System In-Plant Calibration Service – Individual 4-Pellet Holder Dosimeters

#### Includes:

- Supply of 10 Calibration packages, each package containing 2 Alanine dosimeters and 1 temperature strip for measurement of maximum irradiation temperature
- Control Package (for Nordion Quality Control)
- Determination of calibration curve for routine dosimetry system for 1 reader
- NRC CLAS 2018-01 Certificate of Calibration for the routine dosimetry system
- NRC CLAS 2018-01 Certificate of Measurement (Alanine measured dose)
- Review of readings obtained by customer for the irradiated routine dosimeters
- Analysis of dosimetry data

#### Notes:

- Temperature range between +10°C and +60°C
- This calibration service by Nordion is accredited under NRC CLAS 2018-01
- Customer is responsible to budget for holder uncertainty

#### Description

Number 10096468

Routine Dosimetry System In-Plant Calibration Service – In-Plant Tapetab Holder

#### Includes:

- Supply of 10 Calibration packages, each package containing 1 in-plant tapetab holder (containing two 4-pellet holders centered by 4 tapetab slots holder) and 1 temperature strip for measurement of maximum irradiation temperature
- Control Package (for Nordion Quality Control)
- Determination of calibration curve for routine dosimetry system for 1 reader
- NRC CLAS 2018-01 Certificate of Calibration for the routine dosimetry system
- NRC CLAS 2018-01 Certificate of Measurement (Alanine measured dose)
- Review of readings obtained by customer for the irradiated routine dosimeters
- Analysis of dosimetry data

#### Notes:

- Temperature range between +10°C and +60°C
- This calibration service by Nordion is accredited under NRC CLAS 2018-01



### 3. In-Plant Calibration

#### Number

10096467

### Description

Routine Dosimetry System In-Plant Calibration Service – In-Plant Perspex Holder

Includes:

- Supply of 10 Calibration packages, each package containing 1 in-plant Perspex holder (containing two 4-pellet holders centered by slot for Perspex dosimeter) and 1 temperature strip for measurement of maximum irradiation temperature
- Control Package (for Nordion Quality Control)
- Determination of calibration curve for routine dosimetry system for 1 reader
- NRC CLAS 2018-01 Certificate of Calibration for the routine dosimetry system
- NRC CLAS 2018-01 Certificate of Measurement (Alanine measured dose)
- · Review of readings obtained by customer for the irradiated routine dosimeters
- · Analysis of dosimetry data

#### Notes:

- Temperature range between +10°C and +60°C
- This calibration service by Nordion is accredited under NRC CLAS 2018-01



#### Description

10096466

Number

#### Routine Dosimetry System In-Plant Calibration Service – In-Plant Alanine Disk/ Radiochromic Film Holder

Includes:

- Supply of 10 Calibration packages, each package containing 1 in-plant disk/FWT holder (containing 2 disk holders centered by slot for FTW film dosimeter) and 1 temperature strip for measurement of maximum irradiation temperature
- Control Package (for Nordion Quality Control)
- Determination of calibration curve for routine dosimetry system for 1 reader
- NRC CLAS 2018-01 Certificate of Calibration for the routine dosimetry system
- NRC CLAS 2018-01 Certificate of Measurement (Alanine measured dose)
- Review of readings obtained by customer for the irradiated routine dosimeters
- · Analysis of dosimetry data

#### Notes:

- Temperature range between +10°C and +60°C
- This calibration service by Nordion is accredited under NRC CLAS 2018-01



# Dosimetry and Calibration Services

## 4. Additional In-Plant Calibration

<b>Number</b>	Description
10009997	Additional In-Plant Calibrations – In-Plant Calibration Service
	Includes: • Supply of 1 additional calibration curve

Notes:

• This service is additional to Routine Dosimetry System In-Plant Calibration Service

This calibration service by Nordion is accredited under NRC CLAS 2018-01

# Dosimetry and Calibration Product

### 1. Alanine Flat Disk Holder for E-Beam

Number 10096465	Description Alanine Disk Holder	3
	Includes: • 2 components (Alanine disk cap with threads and Alanine bottom with 4 holes)	

#### **About Nordion**

Nordion is the leading global provider of reliable, long-term, end-to-end Cobalt-60 supply and services. With a 75-year history of safety and quality, we are the leading global provider of Gamma technologies that benefit the lives of millions. We ensure reliable supply to the leaders in healthcare, including our sister business, Sterigenics. Learn more about Nordion at www.nordion.com

Safeguarding Global Health® – with every Cobalt-60 source we supply.



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