



DOSIMETRY PRODUCTS & SERVICES 2021 PRICE LIST



Dosimetry and Calibration Products and Services

- All prices are in Canadian Dollars
- 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



Prices for all products and services are effective January 1, 2021. Prices are subject to changes without notice. Payable in Canadian dollars. Ex-works Ottawa, Ontario, Canada. Exclusive of duty and/or taxes where applicable. Orders are subject to Nordion's standard Terms and Conditions of Sale.


Dosimetry and Calibration Services

1.0 Supply and Reading of Dosimeters


Number	Description	Price
10094113	SUPPLY AND READING OF ALANINE DOSIMETERS – 4-PELLET CYLINDRICAL HOLDER Includes: <ul style="list-style-type: none"> • Supply and reading of each dosimeter • NRC CLAS 2018-01 Certificate of Measurement (Alanine measured dose) • Quality Control package Notes: <ul style="list-style-type: none"> • Minimum Order: 7 dosimeters • Dose Range: 20 Gy to 80 kGy • This measurement service by Nordion is accredited under NRC CLAS 2018-01 	\$414.00 per dosimeter 
10096474	SUPPLY AND READING OF ALANINE DOSIMETERS – DISK HOLDER FOR E-BEAM Includes: <ul style="list-style-type: none"> • Supply and reading of each dosimeter • NRC CLAS 2018-01 Certificate of Measurement (Alanine measured dose) • Quality Control package Notes: <ul style="list-style-type: none"> • Minimum Order: 7 dosimeters • Dose Range: 20 Gy to 80 kGy • This measurement service by Nordion is accredited under NRC CLAS 2018-01 	\$414.00 per dosimeter 


2.0 Irradiation of Dosimeters

Number	Description	Price
10009995	IRRADIATION OF DOSIMETERS – 10-POSITION IRRADIATION STAND	\$2,472.00 for first dose point
	Includes: <ul style="list-style-type: none"> 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 NRC CLAS 2018-01 Certificate of Accuracy supplied with return of dosimeters to customer <p>Customer to Specify:</p> <ul style="list-style-type: none"> Number of dose points Number of dosimeters (maximum 10) for each dose point Irradiation temperature in °C <p>Notes:</p> <ul style="list-style-type: none"> Specified doses up to 250 kGy Specified irradiation temperature to be between 0°C and +60°C Each dosimeter must fit into a 12 mm (0.5 in) diameter cylinder with maximum height of 75 mm (3 in) This irradiation service by Nordion is accredited under NRC CLAS 2018-01 	<p>\$402.00 for each additional dose point</p>  

Number	Description	Price
10096469	IRRADIATION OF DOSIMETERS – FILM IRRADIATION STAND	\$2,472.00 for first dose point
	Includes: <ul style="list-style-type: none"> 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 NRC CLAS 2018-01 Certificate of Accuracy supplied with return of dosimeters to customer <p>Customer to Specify:</p> <ul style="list-style-type: none"> Number of dose points Number of dosimeters for each dose point Irradiation temperature in °C <p>Notes:</p> <ul style="list-style-type: none"> 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 	<p>\$402.00 for each additional dose point</p> 

3.0 In-Plant Calibration

Number	Description	Price
10094114	ROUTINE DOSIMETRY SYSTEM IN-PLANT CALIBRATION SERVICE – INDIVIDUAL 4-PELLET HOLDER DOSIMETERS	\$6,680.00 per batch of dosimeters
	<p>Includes:</p> <ul style="list-style-type: none"> 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 <p>Notes:</p> <ul style="list-style-type: none"> 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 	

Number	Description	Price
10096468	ROUTINE DOSIMETRY SYSTEM IN-PLANT CALIBRATION SERVICE – IN-PLANT TAPETAB HOLDER	\$6,680.00 per batch of dosimeters
	<p>Includes:</p> <ul style="list-style-type: none"> 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 <p>Notes:</p> <ul style="list-style-type: none"> Temperature range between +10°C and +60°C This calibration service by Nordion is accredited under NRC CLAS 2018-01 	

Number	Description	Price
10096467	ROUTINE DOSIMETRY SYSTEM IN-PLANT CALIBRATION SERVICE – IN-PLANT PERSPEX HOLDER	\$6,680.00 per batch of dosimeters

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



Number	Description	Price
10096466	ROUTINE DOSIMETRY SYSTEM IN-PLANT CALIBRATION SERVICE – IN-PLANT ALANINE DISK/RADIOCHROMIC FILM HOLDER	\$6,680.00 per batch of dosimeters

Includes:

- Supply of 10 Calibration packages, each package containing 1 in-plant disk/FTW 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



4.0 Additional In-Plant Calibration

Number	Description	Price
10009997	ADDITIONAL IN-PLANT CALIBRATIONS – IN-PLANT CALIBRATION SERVICE	\$1,679.00 per additional calibration curve
	Includes:	
	• Supply of 1 additional calibration curve	
	Note:	
	• This service is additional to Routine Dosimetry System In-Plant Calibration Service	
	• This calibration service by Nordion is accredited under NRC CLAS 2018-01	

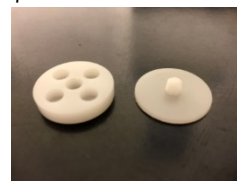
5.0 Absorbed Dose Mapping

Number	Description	Price
10094112	ABSORBED DOSE MAPPING FOR A PRODUCTION IRRADIATOR -- ALANINE	\$16,712.00 per absorbed dose mapping service (if performed in conjunction with a source loading).
	Includes:	
	• Dose mapping service for 1 production irradiator using 1 batch of customer supplied routine dosimeters, read on a maximum of 2 readers	
	• Nordion will provide procedures for performing absorbed dose mapping	
	• Dosimeter packages consisting of Alanine dosimeters and temperature strips (the customer adds 4 routine dosimeters)	Expenses charged as incurred if not performed with a source loading.
	• Analysis of customer's routine dosimeter readings done at the customer's site by customer's technicians	
	• Dosimetry Report prepared by Nordion	
	Additional Customer Responsibilities:	
	• Provide all routine dosimeters	
	• Provide phantom material or homogeneous actual product which occupies the design limit of the carrier (or close to the design limit)	
	• Ensure that dosimetry can be done on a schedule that is agreed to by Nordion	
	• Select suitable in-plant holder for the process	
	• Ensure availability of sufficient resources for loading product, operating the irradiator and loading/retrieving dosimeters	
	Note:	
	• This dose mapping service by Nordion is accredited under NRC CLAS 2018-01	

Dosimetry and Calibration Products

1.0 Alanine Flat Disk Holder for E-Beam

Number	Description	Price
10096465	ALANINE DISK HOLDER	\$52.00
	Includes:	
	<ul style="list-style-type: none"> 2 components (alanine disk cap with threads and alanine bottom with 4 holes). 	



2.0 Compu-Dose Software

Number	Description	Price
10094115	COMPU-DOSE SOFTWARE	\$4,218.00
	Includes:	
	<ul style="list-style-type: none"> Software on USB memory stick (includes data set for converting multimeter reading to dose – kGy) Certificate of validation 	

About Nordion

Nordion, a Sotera Health company, is a leading provider of gamma technologies used for the prevention and treatment of disease and infection. Nordion's products are used daily by pharmaceutical and biotechnology companies, medical-device manufacturers, hospitals, clinics and research laboratories. Nordion supplies products to more than 40 countries around the world, and is committed to their mission, Safeguarding Global Health™ with every critical isotope they supply.

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