



U.S. Department
of Transportation

1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Pipeline and
Hazardous Materials
Safety Administration

IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE USA/0357/S-96, REVISION 10

This certifies that the sources described have been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and United States of America² for the transport of radioactive material.

1. Source Identification - Eckert & Ziegler Isotope Products (EZIP) source capsule Models 3203 and 3214.
2. Source Description - Cylindrical single encapsulations made of Type 304 or 304L stainless steel, with a 0.05 mm (0.002 in.) thick window at one end, and fusion seal welded. Approximate outer dimensions are 7.9 mm (0.312 in.) in diameter and 5.1 mm (0.200 in.) in length. Construction shall be in accordance with attached EZIP Drawing No. 3203, Rev. G, Sheet 3 of 6 (Model 3203); or Isotope Products Laboratories Drawing No. A3214, Rev. A (Model 3214).
3. Radioactive Contents - The sources described by this certificate are authorized to contain any one of the following radionuclides limited to the activity shown. The radionuclides are in the form of chlorides, nitrates, or oxides in ceramic; oxides in gold or aluminum; or metal plated onto substrate. The Na-22 may also be in the form of NaCl in gold or ceramic. The Ge-68 may also be in the form of GeO₂ in silver. The Sr-90 may also be in the form of SrTiO₄ in silver. The Ba-133 may also be in the form of BaSO₄ in ceramic.

Radionuclide	Activity MBq	(mCi)
Na-22	185	(5)
Co-57	11,100	(300)
Co-58	11,100	(300)
Co-60	370	(10)
Ge-68	1,850	(50)
Sr-90	4,625	(125)
Ru-106	1,850	(50)
Ba-133	3,700	(100)
Cs-137	11,100	(300)
Ra-226	1,850	(50)
Lanthanides*	11,100	(300)
Actinides**	1,110	(30)

* (Isotopes of Ce, Pr, Sm, Eu, Gd, Tm, and Yb only)

** (Isotopes of Ac, Th, Pa, U, Pu, Am, and Cm only)

4. Quality Assurance - Records of Quality Assurance activities required by paragraph 310 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors in the United States exporting shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.

¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

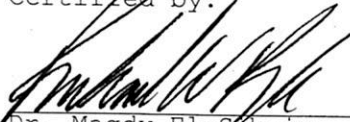
² Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

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5. Expiration Date - This certificate expires on January 31, 2021.

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the December 22, 2015 petition by Eckert & Ziegler Isotope Products, Valencia, CA, and in consideration of other information on file in this Office.

Certified by:



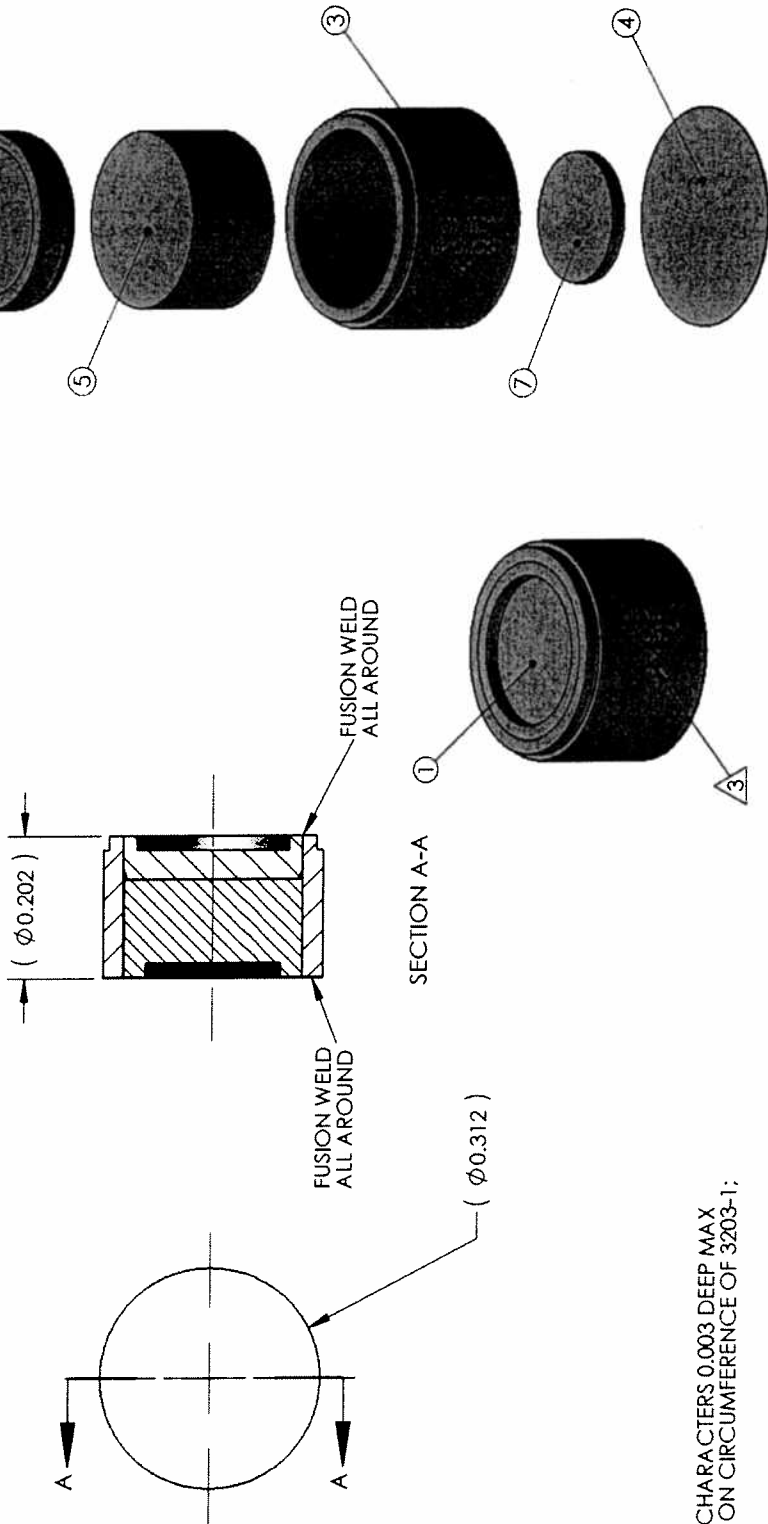
Dr. Magdy El-Sibaie
Associate Administrator for
Hazardous Materials Safety

FEB - 2 2016

(DATE)

Revision 10 - Issued to extend the expiration date.

X	ACTIVE ELEMENT SIZE	DESCRIPTION	ITEM #
0	0.000" DIA X 0.000" NO HOLE	ASSEMBLY	1
1	0.125" DIA X 0.030"	CAPSULE BODY	3
2	0.187" DIA X 0.020"	WINDOW	4
3	0.210" DIA X 0.040"	SHIELD	5
4	0.250" DIA X 0.040"	PLUG	6
		ACTIVE ELEMENT	7



ENGRAVE CHARACTERS 0.003 DEEP MAX
 CENTERED ON CIRCUMFERENCE OF 3203-1;
 IPL
 ISOTOPE
 ACTIVITY
 SERIAL NUMBER
 2. PACKAGE AND IDENTIFY PART NUMBER THERE ON
 1. ASSEMBLE PER ENGINEERING DRAWING
 NOTES: UNLESS OTHERWISE SPECIFIED

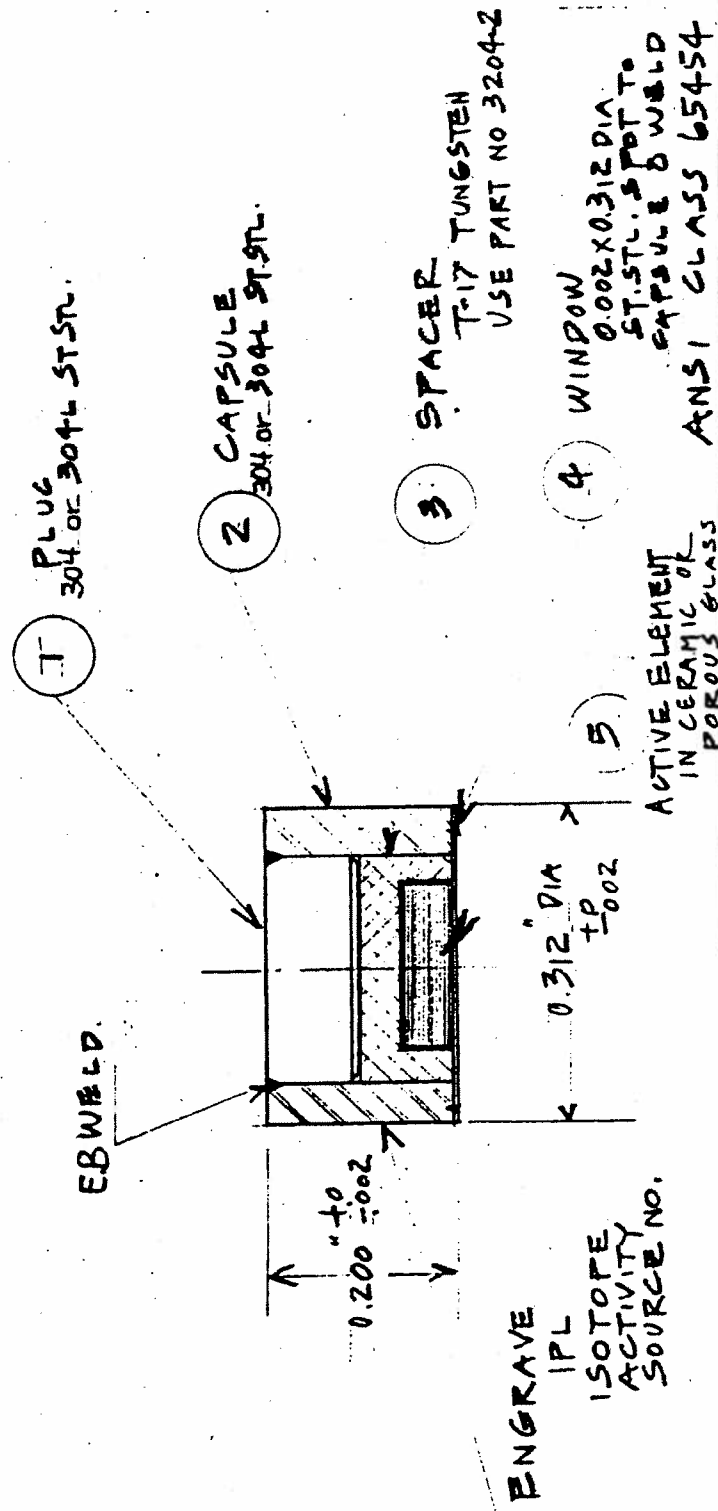
P/N A3203-X ASSEMBLY

Eckert & Ziegler Isotope Products VALENCIA, CALIFORNIA 91355	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCH- SIZES. METRIC UNITS [mm] ARE IN MILLIMETERS.		DRAWN KP	TITLE MODEL 3203 GFS-3 SOURCE	CAGE CODE 32993	REV G	SHEET 3 OF 6
	TOLERANCES X.XXX ± .002 INCH ANGULAR TOLERANCE OF 0°±30' X.XX ± .005 INCH FRACTIONAL DIMENSIONS ± 1/32" X.X ± .03 INCH REFERENCE DIMENSIONS (I N/A) X. ± .1 INCH SURFACE ROUGHNESS (INCH MAX) ALL DIMENSIONS ARE FINISHED DIMENSIONS	ME/CHECKER EZ	ENGINEER EZ	SCALE NONE	SERIES TITLE GFS AND XFB SOURCES (PHI & BFI)	DRAWING NO. 3203	SIZE A
THIRD ANGLE PROJECTION							
THIS DRAWING IS THE PROPERTY OF ISOTOPE PRODUCTS LABORATORIES AND MAY NOT BE USED, REPRODUCED, PUBLISHED OR DISCLOSED TO OTHERS WITHOUT EXPRESS AUTHORIZATION BY ISOTOPE PRODUCTS LABORATORIES.							

GROUP #1



ACTUAL SIZE



ISOTOPE PRODUCTS LABORATORIES BURBANK, CALIFORNIA 91504		APPROVED BY:	DRAWN BY: E.W.
		SCALE: 5/16	REVISED: A 9/15/87
DATE: 2-26-87		LOW ENERGY X RAY SOURCE. GFS-3	
GFS AND XFB SOURCES		DRAWING NUMBER A3214	

APPROVED BY: E.W. 2-26-87

DATE: 04 3/3/87

BY: JMC 3-3-87



U.S. Department
of Transportation

East Building, PHH-23
1200 New Jersey Avenue SE
Washington, D.C. 20590

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Hazardous Materials
Safety Administration**

CERTIFICATE NUMBER: USA/0357/S-96, Revision 10

ORIGINAL REGISTRANT(S):

Ms. Frida Tan
Regulatory Affairs Manager
Eckert & Ziegler Isotope Products
24937 Avenue Tibbitts
Valencia, 91355
USA

REGISTERED USER(S):

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