



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/0498/S-96, REVISION 3

This certifies that the source described has 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) Model HEG-1.
2. Source Description - Cylindrical single encapsulation made of Type 304 or 304L stainless steel and fusion seal welded. Approximate outer dimensions are 4.7 mm (0.186 in.) in diameter and 5.7 mm (0.225 in.) in length. Construction shall be in accordance with attached IPL Drawing No. 3025, Sheet 3 of 3, Rev. --.
3. Radioactive Contents - The source described by this certificate is authorized to contain any one of the following radionuclides in the chemical form identified and limited to the activity shown.

Radionuclide	Form	Activity GBq (Ci)
Na-22	NaCl in gold or ceramic	3.7 (0.10)
Co-57	CoO, CoCl ₂ or Co(NO ₃) ₂ in ceramic	11.1 (0.30)
Co-58	CoO, CoCl ₂ or Co(NO ₃) ₂ in ceramic	11.1 (0.30)
Co-60	CoO, CoCl ₂ or Co(NO ₃) ₂ in ceramic or Co pellets	11.1 (0.30)
Ge-68	GeCl ₄ in ceramic	1.85 (0.05)
Ba-133	BaSO ₄ or BaCl ₂ in gold or ceramic	3.7 (0.10)
Cs-137	CsCl, Cs ₂ SO ₄ or CsNO ₃ in ceramic, Al or Au pellets	11.1 (0.30)
Ra-226	RaSO ₄ in gold or ceramic	1.85 (0.05)
Cf-252	Oxide in metal or ceramic	0.037 (0.001)
Actinides*	Oxides in gold or ceramic	1.85 (0.05)

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

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 and consignees in the United States exporting or importing 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.

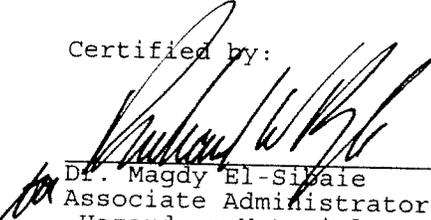
² Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

CERTIFICATE USA/0498/S-96, REVISION 3

5. Expiration Date - This certificate expires on July 31, 2015.

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 June 22, 2010 petition submitted by Eckert & Ziegler Isotope Products, Valencia, CA and in consideration of other information on file in this Office.

Certified by:

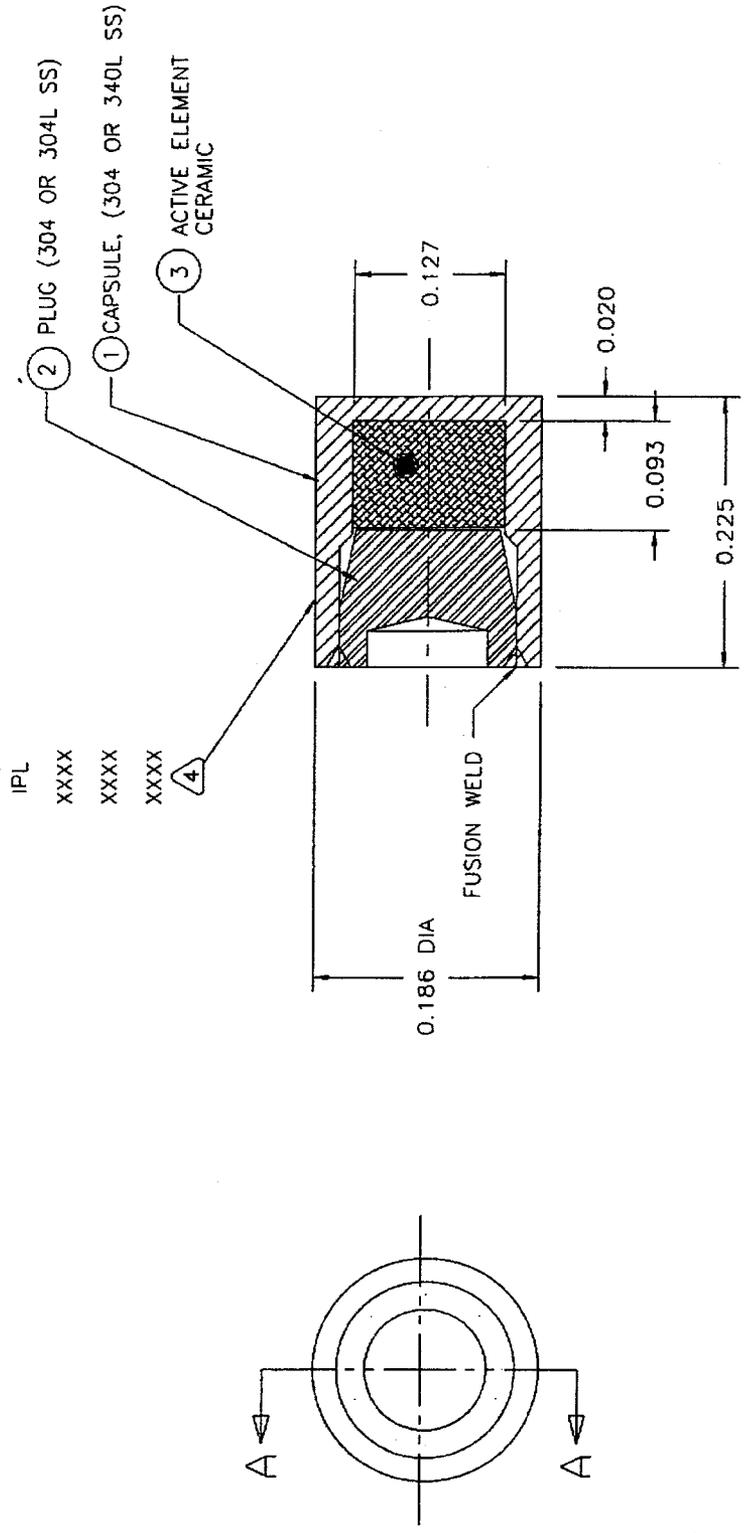


Dr. Magdy El-Sibaie
Associate Administrator for
Hazardous Materials Safety

JUL 12 2010

(DATE)

Revision 3 - Issued to update corporate name and chemical forms for Co-58, Co-60, and Cs-137 and to extend the expiration date.



P/N: A3025

ASSEMBLY

SECTION A-A

5. PACKAGE AND IDENTIFY PART NUMBER THEREON

4 ENGRAVE CHARACTERS 0.060 HIGH x 0.003 DEEP MAX ON CIRCUMFERENCE AND BLACK FILL WHEN NOT INSTALLED IN SECONDARY CAPSULE:

IPL
ISOTOPE
ACTIVITY
SERIAL NUMBER

3. TOLERANCES: 0.XXX 0.002, 0.XX 0.01±0.X 0.1, ANGLE 0.5 ± °

2. DIMENSIONS ARE IN INCHES

1. ASSEMBLE COMPLETE PER ENGINEERING DRAWING AND FUSION WELD AS REQUIRED

NOTE: UNLESS OTHERWISE SPECIFIED

DATE: 12/29/94	SCALE: NTS	DRAWING NUMBER	SHEET:
DESIGNED: JMD/RLT	REV/CHG: -	3025	3 OF 3



U.S. Department
of Transportation

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

**Pipeline and
Hazardous Materials
Safety Administration**

CERTIFICATE NUMBER: USA/0498/S-96, Revision 3

ORIGINAL REGISTRANT(S):

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

REGISTERED USER(S):

Mr. Richard Boyle
Chief, Radioactive Materials
PHH23 and Associates
U.S. Department of Transportation
PHMSA (PHH-23)
400 Seventh St. SW
Washington, 20590
USA