



U.S. Department
of Transportation

Pipeline and
Hazardous Materials
Safety Administration

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

IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS

CERTIFICATE USA/0775/S-96, REVISION 2

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 the United States of America² for the transport of radioactive material.

1. Source Identification - Eckert & Ziegler Isotope Products Model No. BP Series (A4163).
2. Source Description - Cylindrical double encapsulation constructed of 17-4PH stainless steel and fusion seal welded. Approximate outer dimensions are 26.62 mm (1.048 in.) in diameter and 134.11 mm (5.28 in.) in length. Construction shall be in accordance with attached Eckert & Ziegler Isotope Products Drawing No. 4163, Rev. B, Sheet 3 of 9.
3. Radioactive Contents - No more than 851 GBq (23 Ci) of Americium-241 (Am:Be). The Am-241 oxide and beryllium powder is in the form of a compressed powder pellet in a metal matrix.
4. Management System Activities - Records of Management System activities required by Paragraph 306 of the IAEA regulations 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.
5. Expiration Date - This certificate expires on June 30, 2024. Previous editions which have not reached their expiration date may continue to be used.

¹ "Regulations for the Safe Transport of Radioactive Material, 2012 Edition, No. SSR-6" 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/0775/S-96, REVISION 2

This certificate is issued in accordance with paragraph(s) 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the June 25, 2019 petition by Eckert & Ziegler Isotope Products, Valencia, CA, and in consideration of other information on file in this Office.

Certified By:

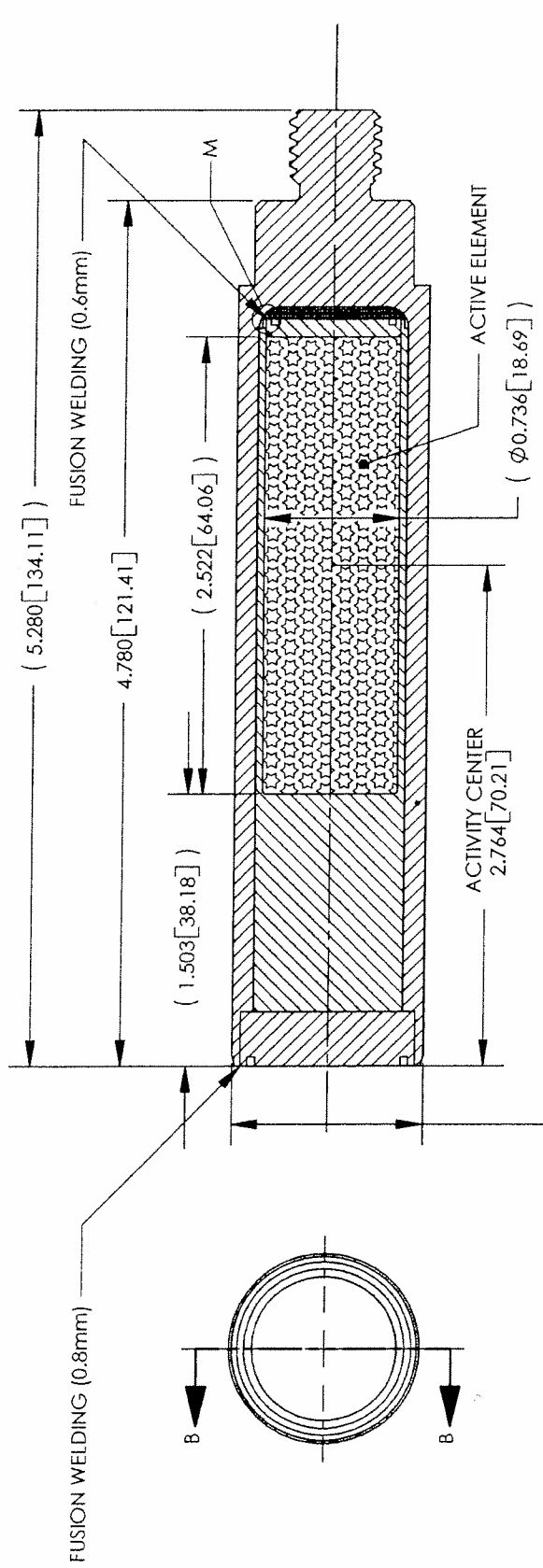


July 03, 2019

(DATE)

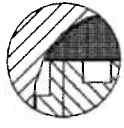
 William Schoonover
Associate Administrator for Hazardous
Materials Safety

Revision 2 - Issued to extend the expiration date.

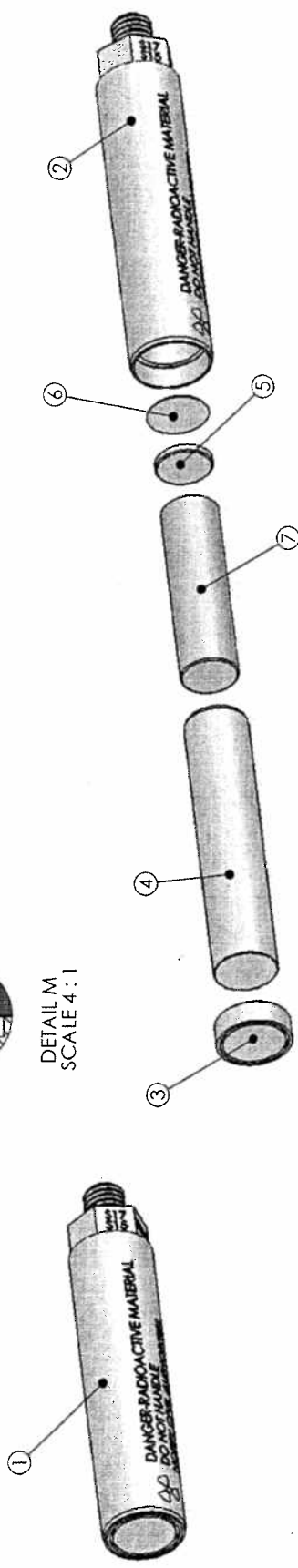


INTERNAL ACTIVE ELEMENT CAPSULE VOLUME
 17575.003 (CYLINDRICAL VOLUME) - 3.254 (END ROUND) = 17571.749 mm³

SECTION B-B
 SCALE 1:1:1



DETAIL M
 SCALE 4:1



2. PACKAGE AND IDENTIFY PART NUMBER THEREON
 1. ASSEMBLE PER ENGINEERING DRAWING
 NOTES: UNLESS OTHERWISE SPECIFIED

P/N A4163 DOUBLE ENCAPSULATED Am-Be SOURCE CAPSULE ASSEMBLY

| | | | | | | |
|--|--|---|------------------------|----------------------|-------------------------------------|-----------------------|
| Eckert & Ziegler Isotope Products VALENCIA, CALIFORNIA 91355 <small>THIS DRAWING IS THE PROPERTY OF ECKERT & ZIEGLER ISOTOPE PRODUCTS AND MAY NOT BE USED, REPRODUCED, PUBLISHED OR DISCLOSED TO OTHERS WITHOUT EXPRESS AUTHORIZATION BY ECKERT & ZIEGLER ISOTOPE PRODUCTS.</small> | UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCH-SIZES. METRIC UNITS (mm) ARE IN MILLIMETERS. | TOLERANCES (UNLESS OTHERWISE SPECIFIED) 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 | THIRD ANGLE PROJECTION | SCALE NONE SIZE A | CAGE CODE 32993 DRAWING NO. 4163 | REV B SHEET 3 OF 9 |
| | DRAWN KP ME/CHECKER JH ENGINEER KP | TITLE BP SERIES; Am-241/Be NEUTRON-SOURCE, BP4163 SERIES TITLE OIL WELL LOGGING (Am-Be GROUP) | | | | |



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ORIGINAL REGISTRANT(S) :

Eckert & Ziegler Isotope Products
24937 Avenue Tibbitts
Valencia, CA, 91355
USA