

MATERIALS LICENSE

Pursuant to the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974 (Public Law 93-438), and Title 10, Code of Federal Regulations, Chapter I, Parts 30, 31, 32, 33, 34, 35, 36, 39, 40, and 70, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued authorizing the licensee to receive, acquire, possess, and transfer byproduct, source, and special nuclear material designated below; to use such material for the purpose(s) and at the place(s) designated below; to deliver or transfer such material to persons authorized to receive it in accordance with the regulations of the applicable Part(s). This license shall be deemed to contain the conditions specified in Section 183 of the Atomic Energy Act of 1954, as amended, and is subject to all applicable rules, regulations, and orders of the Nuclear Regulatory Commission now or hereafter in effect and to any conditions specified below.

Licensee		In accordance with application dated January 2, 2015	
1. Bruker Detection Corporation		3. License number 20-32465-02E is amended in its entirety to read as follows:	
2. 40 Manning Road Billerica, Massachusetts 01821		4. Expiration date January 31, 2017	
		5. Docket No. 030-37315 Reference No.	
6. Byproduct, source, and/or special nuclear material	7. Chemical and/or physical form	8. Maximum amount that licensee may possess at any one time under this license	
A. Nickel-63	A. Foil Sources (Eckert & Ziegler Isotope Products, Inc. Model NER-004 or NER-004P; QSA Global Model NBCD or NBC; RITVERC GmbH Model BNI 3.441)	A. Not applicable (See Condition 11)	
B. Barium-133	B-O. Solid Sealed Sources	B-O. Not applicable (See Condition 11)	
C. Carbon-14			
D. Cadmium-109			
E. Cesium-137			
F. Cobalt-57			
G. Cobalt-60			
H. Europium-152			
I. Iron-55			
J. Manganese-54			
K. Sodium-22			
L. Polonium-210			
M. Strontium-90			
N. Thallium-204			
O. Zinc-65			

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SUPPLEMENTARY SHEET**License Number
20-32465-02EDocket or Reference Number
030-37315

Amendment No. 08

9. Authorized use:

- A. In accordance with 10 CFR 32.26, "Gas and aerosol detectors containing byproduct Material: Requirements for license to manufacture, process, produce, or initially transfer," the licensee is authorized to distribute gas and aerosol detectors as specified in Condition 10 of this license to persons exempt from the requirements for a license under 10 CFR 30.20, or equivalent regulations of any Agreement State.
- B-O. In accordance with 10 CFR 32.18, "Manufacture, distribution and transfer of exempt quantities of byproduct material: Requirements for a license," the licensee is authorized to distribute encapsulated check sources, not to exceed the exempt quantities of 10 CFR 30.71, "Schedule B," to persons exempt from licensing under 10 CFR 30.18, "Exempt quantities," or equivalent regulations of any Agreement State.

CONDITIONS

10. The following devices containing byproduct material designed and manufactured in accordance with NRC registration certificate No. NR-1101-D-102-E, may be distributed according to this license provided the amount of nickel-63 contained in each device does not exceed the amount specified in the following table:

<u>Device Model</u>	<u>Maximum Quantity Per Device</u>
RAID Series	2.7 millicuries (100 MBq)
TIMON	2.7 millicuries (100 MBq)
OrthoTIMON	2.7 millicuries (100 MBq)

11. This license does not authorize possession or use of licensed material.
12. The licensee may distribute only from its facilities located at 40 Manning Road, Billerica, Massachusetts.
13. The licensee shall file periodic reports as specified in 10 CFR 32.20(b) and 10 CFR Part 32.29(c).
14. The check sources distributed under 10 CFR 32.18 may be attached to the outside of radiation detection instruments for the convenience of the user.

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15. Except as specifically provided otherwise by this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear Regulatory Commission's regulations shall govern unless the statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.

- A. Application dated July 18, 2006 (w/encs.) (ML062090405);
- B. Letter dated November 13, 2006 (ML070120464);
- C. Letter dated December 21, 2006 (ML070090584);
- D. Letter dated April 20, 2007 (ML071240203);
- E. Letter dated June 26, 2007 (ML072140035);
- F. Letter dated October 11, 2007 (ML072990324);
- G. Letter dated August 6, 2008 (w/encs.) (ML14041A448);
- H. Letter dated October 15, 2009 (ML092960174);
- I. Letter dated February 8, 2010 (ML100539602);
- J. Letter dated April 3, 2012 (ML12103A348);
- K. Letter dated July 19, 2012 (ML12215A296);
- L. Application dated July 27, 2012 (ML12222A146);
- M. Application dated July 31, 2013 (ML13218B124), with attachments (ML13218B143, ML13218B166, ML13218B189, ML13218B210, ML13218B226, ML13218B229, ML13218B238, ML13218B268, ML13218B273);
- N. Letter dated November 4, 2013 (ML13331A871);
- O. Letter dated February 4, 2014 (ML14038A350), with attachments (ML14038A356, ML14038A364, ML14038A370, ML14038A375);
- P. Letter dated January 2, 2015 (ML15013A288), with attachment (ML15013A287);
- Q. Letter dated April 27, 2015 (ML15127A224); and
- R. Letter dated June 16, 2015 (ML15173A296), with attachment (ML15173A302).

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Date: July 9, 2015

By: /RA/
Shirley S. Xu
Materials Safety Licensing Branch
Division of Material Safety, State, Tribal,
and Rulemaking Programs
Office of Nuclear Material Safety
and Safeguards
Washington, DC 20555