

U. S. NUCLEAR REGULATORY COMMISSION 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 1, Parts 30, 31, 32, 33, 34, 35, 36, 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); and to import such byproduct and source material. 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		
1. The Goodyear Tire & Rubber Company Department 1081 1144 East Market Street 2. Akron, Ohio 44316		3. License number 34-00508-16
		4. Expiration date November 30, 1985
		5. Reference No. 9-02, 37-11510-02, & 45-13325
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. Carbon 14	A. Sealed sources (Goodyear custom-made Type C-14 Beta Source)	A. Not to exceed 5 millicuries per source
B. Cesium 137	B. Sealed sources (Atomchan Type 2000, Model CS 2-10)	B. Not to exceed 100 millicuries per source
C. Cesium 137	C. Sealed sources (Ohmart Corporation Model A 2102)	C. Not to exceed 300 millicuries per source
D. Cesium 137	D. Sealed sources (Ohmart Corporation Model A 2102)	D. Not to exceed 1000 millicuries per source
E. Cesium 137	E. Sealed sources (Tracerlab Model S-3)	E. Not to exceed 45 millicuries per source
F. Cesium 137	F. Sealed sources (Industrial Nucleonics Model S-6)	F. Not to exceed 12 millicuries per source
G. Cobalt 60	G. Sealed sources (Berthold Model FAS/TR)	G. Not to exceed 15 millicuries per source
H. Nickel 63	H. Foils contained in Perkin-Elmer Model 009-0282 detector cells	H. Not to exceed 15 millicuries per source
I. Strontium 90	I. Sealed sources (Tracerlab Model S-1A)	I. Not to exceed 30 millicuries per source

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9. Authorized use

- A. For use in Goodyear Custom-Made Beta Gauges for thickness measurements.
- B. For use in Eon Corporation Model 64-764 source holders for calibration of instruments.
- C. For use in Ohmart Corporation Model SHGS-2 source holders for density/level measurements.
- D. For use in Ohmart Corporation Models SHLG-1 and SR-1 source holders for density/level measurements.
- E. For use in Tracerlab Model BG-5 gauges for density/level measurements.
- F. For use in Industrial Nucleonic LS-101 source holders for density/level measurements.
- G. For use in Berthold Model LB-3121 source holders for density/level measurements.
- H. For use in gas chromatographs for sample analysis.
- I. For use Tracerlab Model BG-1A gauges for density/level measurements.

CONDITIONS

- 10. Licensed material shall be used only at 1210 Massillon Road, Akron, Ohio, 1452 East Archwood, Akron, Ohio, 1 Goodyear Boulevard, Lawton, Oklahoma, Goodyear Boulevard, Danville, Virginia and Goodyear Chemical Plant, Point Pleasant, West Virginia except that licensed material may be possessed in licensee vehicles during transportation between licensee facilities in locations anywhere in the United States where the Nuclear Regulatory Commission maintains jurisdiction for regulating the use of licensed material.
- 11. The licensee shall comply with the provisions of Title 10, Chapter 1, Code of Federal Regulations, Part 19, "Notices, Instructions and Reports to Workers; Inspections" and Part 20, "Standards for Protection Against Radiation."
- 12. Licensed material shall be used by, or under the supervision of, J. L. Holtshouser, E. Puhala, W. Cox, W. Irby, E. V. Clarke, Jr., D. J. Accorsi, G. L. Hess, W. C. Stacy and other individuals who have received the training described in the licensee application received October 29, 1980 and letter dated May 8, 1980.
- 13. A. (1) Each sealed source containing licensed material, other than Hydrogen 3, with a half-life greater than thirty days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a sealed source received from another person shall not be put into use until tested.

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- (2) Notwithstanding the periodic leak test required by this condition, any licensed sealed source is exempt from such leak tests when the source contains 100 microcuries or less of beta and/or gamma emitting material or 10 microcuries or less of alpha emitting material.
- (3) The periodic leak test required by this condition does not apply to sealed sources that are stored and not being used. The sources excepted from this test shall be tested for leakage prior to any use or transfer to another person unless they have been leak tested within six months prior to the date of use or transfer.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within five (5) days of the test with the U. S. Nuclear Regulatory Commission, Region III, Office of Inspection and Enforcement, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, describing the equipment involved, the test results, and the corrective action taken.
- D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
- 14. Sealed sources containing licensed material shall not be opened or removed from their respective source holders by the licensee.
- 15. In lieu of using the conventional radiation caution colors (magenta or purple on yellow background) as provided in Section 20.203(a)(1), Title 10, Code of Federal Regulations, Part 20, the licensee is hereby authorized to label detector cells and cell baths, containing licensed material and used in gas chromatography devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.

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16. A. Each chromatograph detector containing Nickel 63 shall be tested for leakage and/or contamination at intervals not to exceed six months. In the absence of a certificate from a transferor indicating that a test has been made within six months prior to the transfer, a detector received from another person shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. The test sample shall be taken from the surfaces of the device in which the foil is mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Commission.
- C. If the test reveals the presence of 0.005 microcurie or more of removable contamination, the licensee shall immediately withdraw the foil from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Commission regulations. A report shall be filed within 5 days of the test with the U. S. Nuclear Regulatory Commission, Region III, Office of Inspection and Enforcement, 799 Roosevelt Road, Glen Ellyn, Illinois 60137, describing the equipment involved, the test results, and the corrective action taken.
- D. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
17. Installation, relocation, maintenance, repair, and initial radiation survey of density, level, or thickness gauges containing licensed material shall be performed only by individuals designated by J. L. Holtshouser, Corporate Radiation Protection Officer, who have completed the Ohmart Training Course; by the device manufacturer; or by other persons specifically authorized by the Commission or an Agreement State to perform such services. Installation, replacement, and disposal of sealed sources containing licensed material used in devices shall be performed only by the device manufacturer or by other persons specifically authorized by the Commission or an Agreement State to perform such services.
18. The licensee shall conduct a physical inventory every six (6) months to account for all foils and sealed sources received and possessed under the license. The records of the inventories shall be maintained for two (2) years from the the date of the inventory for inspection by the Commission, and shall include the quantities and kinds of byproduct material, location of foils and sealed sources, and the date of the inventory.

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19. Detector cells containing licensed material shall not be opened or the foil sources removed from the detector cell by the licensee.
20. The licensee may transport licensed material or deliver licensed material to a carrier for transport in accordance with the provisions of Title 10, Code of Federal Regulations, Part 71, "Packaging of Radioactive Material for Transport and Transportation of Radioactive Material Under Certain Conditions."
21. Except as specifically provided otherwise by this license, the licensee shall possess and use licensed material described in Items 6, 7, and 8 of this license in accordance with statements, representations, and procedures contained in application received October 29, 1979, and letters dated May 8, 1980 and October 20, 1980. The Nuclear Regulatory Commission's regulations shall govern the licensee's statements in applications or letters, unless the statements are more restrictive than the regulations.

Date NOV 14 1980

For the U. S. Nuclear Regulatory Commission
Original Signed By

PAUL R. GUINN
by Material Licensing Branch

Division of Fuel Cycle and
Material Safety
Washington, D.C. 20555

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