

EXPORT LICENSE

NRC FORM 250
(10-07)

UNITED STATES OF AMERICA

Nuclear Regulatory Commission
Washington, D.C. 20555

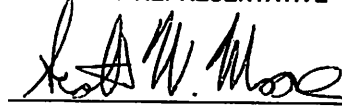
NRC LICENSE NO.: **XMAT410**
Amendment No. 01

Page 1 of 2

NRC DOCKET NO.: **11005754**

LICENSE EXPIRES **December 31, 2014**

Pursuant to the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974 and the regulations of the Nuclear Regulatory Commission issued pursuant thereto, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued to the licensee authorizing the export of the materials and/or production or utilization facilities listed below, subject to the terms and conditions herein.

<p align="center">LICENSEE</p> <p>Sigma-Aldrich Corporation and Subsidiaries 600 North Teutonia Avenue Milwaukee, WI 53209</p> <p>Attn: Jared Fenton</p>	<p align="center">ULTIMATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES)</p> <p align="center">See Page 2</p> <p>(For distribution into the medical, pharmaceutical, chemical, and industrial markets for non-nuclear end use)</p>	
<p align="center">INTERMEDIATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES)</p> <p align="center">NONE</p>	<p align="center">OTHER U.S. PARTY(IES) TO EXPORT</p> <p align="center">NONE</p>	
<p>APPLICANT'S REFERENCE NO. Appl. Dated August 11, 2011</p>		<p>ULTIMATE DESTINATION: Japan</p>
<p align="center">QUANTITY</p> <p align="center">5,000.0 kilograms</p>	<p align="center">DESCRIPTION OF MATERIALS OR FACILITIES</p> <p>Deuterium in the form of deuterated compounds, deuterium oxide (heavy water), and deuterium gas.</p> <p>License is amended to: 1) change licensee contact name information; 2) extend the expiration date from December 31, 2011 to December 31, 2014; and 3) remove the Canadian obligation reference.</p> <p>All other conditions remain the same.</p>	
<p>Neither this license nor any right under this license shall be assigned or otherwise transferred in violation of the provisions of the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974.</p> <p>This license is subject to the right of recapture or control by Section 108 of the Atomic Energy Act of 1954, as amended, and to all of the other provisions of said Acts, now or hereafter in effect and to all valid rules and regulations of the Nuclear Regulatory Commission.</p>		<p align="center">THIS LICENSE IS INVALID UNLESS SIGNED BELOW BY AUTHORIZED NRC REPRESENTATIVE</p> <p>SIGNATURE: </p> <p>NAME AND TITLE: Scott W. Moore, Deputy Director Office of International Programs</p> <p>DATE OF ISSUANCE: <u>January 18, 2012</u></p>

EXPORT LICENSE

ULTIMATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES): (Cont'd)

- 1. SIGMA-ALDRICH Japan KK
2-2-24 Higashi-Shinagawa
Shinagawa-Ku
Tokyo, 1400002
Japan**

(For distribution into the medical, pharmaceutical, chemical, and industrial markets for non-nuclear end use)

- 2. Taiyo Nippon Sanso Corporation
Toyo Bldg, 1-3-26 Koyama
Shinagawa-Ku
Tokyo, 1428558
Japan**

(For distribution into the medical, pharmaceutical, chemical, and industrial markets for non-nuclear end use)

- 3. SIGMA-ALDRICH Japan KK
368 Oomachi
Ichikawa-Shi
Chiba-Ken, 2720801
Japan**

(For distribution into the medical, pharmaceutical, chemical, and industrial markets for non-nuclear end use)

////////////////////////////////////END////////////////////////////////////