

**EXPORT LICENSE**

NRC FORM 250  
(10-07)

**UNITED STATES OF AMERICA**

Nuclear Regulatory Commission  
Washington, D.C. 20555

NRC LICENSE NO.: XMAT410/02

Page 1 of 2

NRC DOCKET NO.: 11005754

LICENSE EXPIRES December 31, 2017

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.

LICENSEE		ULTIMATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES)	
Sigma-Aldrich Co. LLC 3050 Spruce Street St. Louis, MO 63103  Attn: Jared Fenton		See Page 2  (For distribution into the medical, pharmaceutical, chemical, and industrial markets for non-nuclear end use)	
INTERMEDIATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES)		OTHER U.S. PARTY(IES) TO EXPORT	
NONE		See page 2	
APPLICANT'S REFERENCE NO. Appl. Dated August 09, 2012		ULTIMATE DESTINATION: Japan	
QUANTITY	DESCRIPTION OF MATERIALS OR FACILITIES		
	The Licensee is authorized to export a cumulative total of 5,000.0 kilograms of deuterium in the form of deuterated compounds, deuterium oxide (heavy water), and deuterium gas.   XMAT410/02 continued on Page 2.		
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.  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.		THIS LICENSE IS INVALID UNLESS SIGNED BELOW BY AUTHORIZED NRC REPRESENTATIVE	
		SIGNATURE: 	
		NAME AND TITLE: Stephen Dembek, Acting Deputy Director Office of International Programs September 20, 2012	
		DATE OF ISSUANCE: _____	

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**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)

**OTHER U.S. PARTY(IES) TO EXPORT: (Cont'd)**

1. Aldrich Chemical Co. LLC  
6000 N. Teutonia Avenue  
Milwaukee, WI 53209
2. Aldrich Chemical Co. LLC  
3858 Benner Road  
Miamisburg, OH 45342
3. Aldrich Chemical Co. LLC  
6950 Ambassador Drive  
Allentown, PA 18106

(Suppliers)

**DESCRIPTION OF MATERIALS OR FACILITIES: (Cont'd)**

License is amended to: 1) revise licensee name; 2) change licensee address; 3) add three "Other U.S. Party(ies) to Export"; and 4) extend the expiration date from December 31, 2014 to December 31, 2017.

All other conditions remain the same.

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