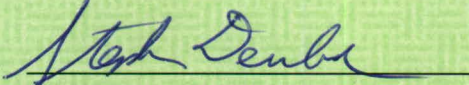


EXPORT LICENSE

NRC FORM 250 (10-07) <p align="center">UNITED STATES OF AMERICA Nuclear Regulatory Commission Washington, D.C. 20555</p>		NRC LICENSE NO.: XMAT416/01 Page 1 of 2 DOCKET NO.: 11005919 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 Sigma-Aldrich Co. LLC 3050 Spruce Street St. Louis, MO 63103 Attn: Jared Fenton		ULTIMATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES) Sigma-Aldrich Chemical Company, Ltd. The Old Brickyard New Road Gillingham Dorset, SP8 4XT United Kingdom (Distribution into medical, pharmaceutical, chemical, and industrial markets)	
INTERMEDIATE CONSIGNEE(S) IN FOREIGN COUNTRY(IES) NONE		OTHER U.S. PARTY(IES) TO EXPORT See Page 2	
APPLICANT'S REFERENCE NO.: Appl. dated 8/9/2012		ULTIMATE DESTINATION: Great Britain	
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. <p align="right">XMAT416/01 continued on Page 2.</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. 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: _____	

EXPORT LICENSE

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.

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