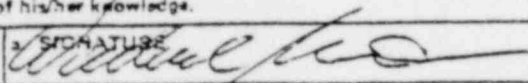


APPLICATION FOR LICENSE TO EXPORT NUCLEAR MATERIAL AND EQUIPMENT (See Instructions on Reverse)

1. APPLICANT'S USE		a. DATE OF APPLICATION 9-12-80		b. APPLICANT'S REFERENCE D-52		2. NRC USE		a. DOCKET NO. 11502208		b. LICENSE NO. XMA10137	
2. APPLICANT'S NAME AND ADDRESS						4. SUPPLIER'S NAME AND ADDRESS					
a. NAME Sigma Chemical Company						RIS					
3. STREET ADDRESS 3500 DeKalb Street						b. NAME					
c. CITY St. Louis,				STATE MO		ZIP CODE 63118		d. STREET ADDRESS			
3. TELEPHONE NUMBER (Area Code - Number - Extension) (314) 771-5765 Ext. 202						e. CITY		STATE		ZIP CODE	
5. FIRST SHIPMENT SCHEDULED		6. FINAL SHIPMENT SCHEDULED		7. APPLICANT'S CONTRACTUAL DELIVERY DATE		3. PROPOSED LICENSE EXPIRATION DATE		9. U.S. DEPARTMENT OF ENERGY CONTRACT NO. (If Known)			
Est - as soon as license issued		Est - 2 yrs from license		Not established issue		2 yrs from issue		N/A			
10. ULTIMATE CONSIGNEE						11. ULTIMATE END USE					
a. NAME Roche Pharmaceutical, Singapore PPE, Ltd.						NMR Applications in Analytical Chemistry See attached.					
b. STREET ADDRESS Shaw Road, Singapore						11a. EST. DATE OF FIRST USE					
c. CITY - STATE - COUNTRY 1336 Singapore						13. INTERMEDIATE END USE					
12. INTERMEDIATE CONSIGNEE						13a. EST. DATE OF FIRST USE					
a. NAME						15. INTERMEDIATE END USE					
b. STREET ADDRESS						15a. EST. DATE OF FIRST USE					
c. CITY - STATE - COUNTRY						15. EST. DATE OF FIRST USE					
14. INTERMEDIATE CONSIGNEE						15. EST. DATE OF FIRST USE					
a. NAME						18. MAX. ELEMENT WEIGHT					
b. STREET ADDRESS						19. MAX. WT. %					
c. CITY - STATE - COUNTRY						20. MAX ISOTOPE WT.					
17. DESCRIPTION (Include chemical and physical form of nuclear material; give dollar value of nuclear equipment and components)						21. UNIT					
19. NRC USE						21. UNIT					
Compounds containing Deuterium; application is for shipment of equivalent of 10 kg of D ₂ O liquid over a 2 year period. See attached.											
22. COUNTRY OF ORIGIN - SOURCE MATERIAL				23. COUNTRY OF ORIGIN-SNM WHERE ENRICHED OR PRODUCED				24. COUNTRIES WHICH ATTACH SAFEGUARDS (If Known)			
U.S.A.								Unknown			
25. ADDITIONAL INFORMATION (Use separate sheet if necessary)											
25. The applicant certifies that this application is prepared in conformity with Title 10, Code of Federal Regulations, and that all information in this application is correct to the best of his/her knowledge.											
17. AUTHORIZED OFFICIAL						a. SIGNATURE			b. TITLE		
									Walter C. Stern, V.P.		

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